

**MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION**



**RISK MANAGEMENT
AND
SAFETY MANUAL**

Administrative Procedures #04-04



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

6611 Kenilworth Avenue • Riverdale, Maryland 20737

AAB19-019

March 25, 2019

Dear Employees,

I am pleased to present the updated Risk Management and Safety Manual. This Manual reflects the Commission's continuing commitment to the highest level of safety. The Commission is dedicated to ensuring that all employees, patrons and visitors have a healthful and safe environment in which to work and enjoy our facilities.

The Manual is issued to implement M-NCPPC policies, Workplace Safety (Administrative Practice 2-21) and Risk Management (Administrative Practice 2-36). These Practices establish agency-wide responsibilities and standards for the protection of individuals and workplace resources. The Manual provides specific procedural direction on the prevention of injuries and accidents, emergency preparedness, loss controls with respect to facilities and programs, liability insurance, handling and reporting of accidents/injuries, and safety requirements specific to various workplace duties.

We have a shared responsibility for organizational safety. The agency's culture encourages active participation and promotion of safety through trainings, inspections, Safety Committees, health and wellness groups, and other activities. This Manual reflects the collaborative work and input of many individuals including staff specialists, employees, and compliance agencies. The effort reflects an exemplary commitment to the protection of our employees, patrons, and other vital resources.

Sincerely,

Anju A. Bennett,



Acting Executive Director

The Risk Management and Safety Manual

Table of Contents

Executive Letter

Section 1 - Governing Policies

Directives:

1.01 Risk Management Policy - Practice 2-21.....	1
1.02 Workplace Safety - Practice 2-36	9
1.03 Administrative Procedures 04-04	11

Section 2 - Emergency Preparedness

2.01 Emergency Notification Plan.....	13
2.02 Emergency Contact List	17
2.03 Emergency Action Plans.....	19
2.04 Buildings and Facilities Security	41

Section 3 - Accident Reporting

3.01 Workers' Compensation Reporting (Employee Injuries)	43
3.02 Reporting and Handling of Non-Employee Injuries.....	49
3.03 Reporting Vehicle Accidents (Practice 6-10)	55
3.04 Property Damage	79

Section 4 - Insurance

4.01 Insurance.....	83
4.02 Vendor Contracts	85
4.03 Procurement - Low Risk Activities.....	89

Section 5 - Safety

5.01 Aerial Personnel Lifts	93
5.02 Bloodborne Pathogen Exposure Control	103
5.03 Confined Space Entry.....	119
5.04 Controlled Substance and Alcohol Free Workplace (M-NCPPC Practice 2-26).....	137
5.05 Electrical (General)	139
5.06 Excavation and Trenching	155
5.07 Fall Protection	187
5.08 Fire Prevention Plans.....	201
5.09 Fire Safety	205
5.10 Forestry and Tree Maintenance	215
5.11 Grounds Maintenance	233
5.12 Hand and Power Tools.....	243
5.13 Hazard Communication (Chemicals)	253
5.14 Hearing Conservation	261
5.15 Housekeeping & Sanitation and Restrooms	269
5.16 Industrial Hygiene.....	275
5.17 Ladders	279
5.18 Lockout Tagout.....	289

5.19 Mail Handling	303
5.20 Mobile Cranes and Rigging	313
5.21 OSHA Recordkeeping.....	319
5.22 Overhead and Gantry Cranes.....	323
5.23 Ozone Action.....	333
5.24 Personal Protective Equipment (PPE).....	337
5.25 Pesticide and Integrated Pest Management.....	349
5.26 Playgrounds.....	363
5.27 Powered Industrial Trucks (Forklifts).....	381
5.28 Recreation	393
5.29 Respiratory Protection.....	403
5.30 Safety Systems	411
5.31 Safety Training.....	429
5.32 Scaffolding.....	433
5.33 Welding, Cutting and Brazing.....	449
5.34 Workplace Violence M-NCPPC Practice 2-35.....	459
5.35 First Aid Kits	461
5.36 Volunteers - General Guidelines for Using Power Tools.....	465
Section 6 - Services, Operations and Plans	
6.01 Risk Management Plan	469
Glossary	475

RISK MANAGEMENT

AUTHORITY

This Practice was originally adopted in October 1978. This Practice was last amended by the Acting Executive Director on March 25, 2019.

**PURPOSE and
BACKGROUND**

This Practice was initially developed in 1978, to establish and define the Commission’s Risk Management Program operations, provide policy for the control of risks, and assign responsibilities for carrying out program requirements. Subsequent to its initial adoption, the Practice was amended as follows:

- April 16, 2003: Amended to update regulatory and internal policy references, introduce more current standards of risk control, clarify risk management program activities and goals, and better identify responsibilities for the reduction and handling of liability matters.
- September 30, 2016: Reviewed and amended to update Maryland’s Tort Cap Limits and to clarify the responsibilities of the Department of Human Resources and Management, and update citation references.
- March 25, 2019: Reviewed and amended to reflect updated references.

REFERENCES

- State of Maryland Occupational Safety and Health Act, (MOSHA), COMAR 09.12.20 Code of Maryland
- Title 29 Code of Federal Regulations Part 1910 (General Industry), Part 1926 (Construction)
- Annotated Code of Maryland, Courts Judicial Proceedings, §5-301-§5-304 (inclusive), Local Government Tort Claims Act
- Annotated Code of Maryland, Courts Judicial Proceedings, §5-512, Immunities and Prohibited Actions-Governmental
- M-NCPPC Administrative Practice 4-10, “Purchasing Policy”
- M-NCPPC Administrative Practice 6-10, “M-NCPPC Vehicle Use Program”
- M-NCPPC Administrative Procedures 04-04, Risk Management and Safety Manual
- Schedule of Insurance in Force, The Maryland National Capital Park and Planning Commission’s Comprehensive Annual Financial Report.
- Montgomery County Code of 1972, §20-37, Comprehensive Insurance and Self-Insurance Program; and the Agreement of July 1, 1978, as amended, between the Commission and Montgomery County for the Commission’s participation and coverage in the Montgomery County Self-Insurance Program.

DEFINITIONS

Actuarial Evaluation A recognized financial technique for establishing funding for current and future liabilities.

The Commission: The governing body of the Maryland-National Capital Park and Planning Commission, which is comprised of five members from each of the agency's two Planning Boards for Montgomery County and Prince George's County.

The Maryland-National Capital Park and Planning Commission: The organizational entity. For purposes of this Practice, the terms "M-NCPPC" or "agency" shall be used to reference the organizational entity.

Risk Assessment The rating of activities to determine the probability of their causing frequent damage or claims against the Commission, catastrophic losses, or a combination of these two probabilities.

Risk Avoidance Eliminating a high-risk activity, or disposal of a high-risk facility, in order to prevent any claim arising against the Commission from the activity, or facility.

Risk Management The process of making and carrying out decisions that will minimize the adverse effects of accidental losses. Risk management involves evaluating the history of losses and risk probability, then designing countermeasures for preventing or limiting the degree of loss. Countermeasures include identification of potential loss exposure; risk avoidance; design and implementation of safety and loss control programs, to include maintenance standards, changes in public services, security measures, pre-employment evaluations of Commission employees, medical monitoring, drug and alcohol-free workplace initiatives, transfer of risk through self-insurance and commercial insurance programs.

Risk Management Fund An internal service fund, funded by budgeted revenue transfers from operating departments to pay for costs or losses associated with the administration of self-insurance, commercial insurance, and reserves.

Risk Retention When an organization knowingly or unknowingly retains losses using funded or unfunded reserves, operating expenses, or simply borrows to pay for losses that occur.

Risk Transfer Shifting of the financial burden of losses from one party to another through commercial insurance or written contracts and agreements.

Self-Insurance Program Provides protection against risks and losses by setting budgeted departmental contributions to the Risk Management Fund; funding of third-party administrator determined case reserves; funding actuarially determined reserves which are incurred but not reported (IBNR) reserves; and funding Commission determined retained earnings reserves.

Subrogation The recovery of damages from a third party whose negligent acts may have caused injury to Commission employees or property, and for which the Commission was obligated to pay, in the form of paid leave and insurance benefits, or through reconstruction and repair.

POLICY

The control of risks and safety shall be primary considerations in the planning and operation of all Commission activities. The Commission shall have a comprehensive Risk Management Program which helps ensure a safe work environment for its employees, and safe recreational facilities and programs for patrons and persons doing business with the agency. The objective of risk management within the Commission is to prevent the loss of life, avoid injury, protect and secure Commission assets, and to keep the cost of managing such risk to a prudent minimum through sound risk controls and insurance coverage.

The Commission's Risk Management Program includes, but is not limited to:

- Management of risks/liabilities through identification of risk exposures and implementation of effective loss control and risk avoidance.
- Transfer of risks through adequate insurance, vendor insurance requirements, and subrogation of third-party claims.
- Compliance with state and federal safety regulations and the implementation of safe practices through training and education.
- Protection of patrons and persons doing business with the Commission.
- Maintenance of employee safety and health through industrial hygiene, inspections, loss investigations, benefits management, and medical testing and monitoring.
- Facility inspections and design review.
- Analysis of accidents and implementation of loss control programs.
- Monitoring and management of claims services under contract with the Commission.

Funding of Risk Management Program Activities: Adequate funds, to the extent available, will be provided for personnel, facilities and equipment necessary to achieve the Commission's loss prevention objectives. These objectives and resources will be developed during the annual budget process.

Risk Management Insurance: The Commission shall comply with all provisions of the Local Government Tort Claims Act. In accordance with the Act, the Commission authorizes the retention (self-insurance) of real and personal property losses not to exceed \$400,000 arising out of a single event or occurrence, and not to exceed \$800,000 for all such retained losses in the aggregate during a single fiscal year.

The Commission also participates in the Montgomery County Self-insurance Program (MCSIP) which includes the Intra-governmental Risk Management Fund. The purpose of the program is to pool participant resources, facilitate self-insurance coverage, underwrite the administration of risk management programs, and to provide excess insurance for losses that are otherwise not covered by participating members' internal insurance coverages. The Program includes other local government members such as Montgomery County Government, Montgomery College, Montgomery County Schools, and other local municipalities. Montgomery County Government is the executor of the MCSIP.

The annual agreement between the Commission and Montgomery County specifies funds on deposit, limits of coverage, program reimbursement, claims procedures and services, and funds

management. MCSIP is guided by the Interagency Insurance Panel, one voting member of which is a Commission representative. Participation in MCSIP helps ensure efficient and economical coverage of risk management activities including, but not limited to:

- Real and personal property leases.
- Property damage (other than vehicles).
- Police professional coverage.
- Public official liability.
- Automobile liability.
- Automobile property damage.
- Workers' compensation coverage.

In addition to participation in the MCSIP, the Commission obtains commercial insurance policies as needed, which include, but are not limited to: catastrophic and blanket coverages, public employee fidelity bonds, protection of fine arts and antique collections, airport operations coverage, museum coverage, and for other specialized protection.

The Commission may also utilize an appropriate alternative to the MCSIP, if it is determined to be in the Commission's best interest.

RESPONSIBILITIES

Department Heads:

The Department Heads shall help ensure safe facilities and programs through the implementation of, and compliance with, the Commission's safety regulations and procedures. Specific activities include, but are not limited to, the following:

1. Providing oversight of the Commission's Risk Management and Safety Programs.
Maintaining safe environments for employees and patrons; requesting assistance from Risk Management and Safety for specialized needs (e.g., industrial hygiene evaluations), when necessary; and ensuring that service, supplies, and equipment meet the standards of federal and state safety compliance agencies such as Occupational Safety and Health Administration (OSHA) Maryland Occupational and Safety and Health (MOSH), Department of Transportation (DOT), Environmental Protection Agency (EPA), and other appropriate agencies.
2. Notifying the Risk Management and Safety Office, Department of Human Resources and Management of any additions/changes to programs or facilities within the department. Departments are responsible for ensuring that risk assessments with recommendations are made for each program or facility that is modified, acquired, or constructed. Departments should utilize the Risk Management and Safety Office, as necessary.
3. Ensuring, to the degree possible, that users of Commission facilities and services follow safe procedures in their activities.
4. Inspecting and protecting areas and activities for which the Commission is responsible. These efforts include:

- a) Frequent inspection by vehicle operators and facility supervisors of the equipment and areas in their custody.
 - b) Support for federal, state, and county mandated inspections.
5. Providing prompt investigation, review, and appropriate remedial action where possible for all losses reported to the Commission and its component departments. The primary purpose of investigation is to identify reasons for loss, necessary corrective actions, and steps that should be implemented to prevent/limit future loss.
 6. Ensuring as appropriate, that administrative proceedings are initiated against employees whose negligent or intentional acts have resulted in monetary loss to the Commission.
 7. Ensuring that Commission employees receive necessary safety awareness training in areas including but not limited to, position-specific safety-sensitive duties, operation of vehicles and specialized equipment/machinery, direct patron services, and emergency response plans.

Department of Human Resources and Management:

The Executive Director shall provide overall supervision for risk management, assign staff to carry out departmental duties for the program, and provide technical support and assistance for departments.

If funds are available, the Executive Director will provide awards and recognition to departments and units that have made notable contributions to the Commission and to patrons by reducing and controlling losses.

With the Secretary-Treasurer, the Executive Director shall evaluate insurance needs and recommended coverages to the Commission. In accordance with the Agreement between the Commission and Montgomery County for participation in the MCSIP, the Executive Director or his/her designee(s) shall be a member of the Montgomery County Interagency Insurance Panel.

Under the general direction of the Executive Director, the responsibilities of the Risk Management and Safety office, Department of Human Resources and Management shall include the following:

1. Establishing guidelines for the management of general liability, fidelity, property, worker's compensation, and other risk exposures arising from Commission operations, including provision of safety engineering and/or loss prevention services by an insurer.
2. Initiating recovery actions against persons and organizations whose negligent, intentional, or otherwise unlawful actions result in monetary loss to the Commission. This responsibility shall be coordinated with the General Counsel. Actions will be joined with insurers and adjusters, when appropriate.

3. Developing and maintaining an effective management information system that will provide accurate analysis of both the fiscal and operational parts of the program. This shall include, but not be limited to the assessment of general liability claims and workers' compensation implications.
4. Planning and coordinating a safety program for all Commission activities, to include education and training in injury prevention, mandated safety and health regulations, emergency preparedness, driver improvement and license monitoring programs, accident investigations, and facility inspections.
5. Assisting in the review of plans and specifications for facilities, grounds, supplies, and equipment, and programs to ensure that they meet safety standards and are free from recognized hazards.
6. Acting as a technical resource and adviser to the Commission, Department Heads, and the Safety Committees in those areas that fall within the Risk Manager's responsibility.
7. Administering and supervising the risk management and group insurance programs.
8. Providing support, training, and prompt feedback to Safety Committees and individuals who offer recommendations for program improvements.
9. Developing and maintaining the Commission's Risk Management/Safety Manual, which contains loss reporting instructions, safety rules and regulations, safety guidelines, current insurance coverage information, and related topics of interest to line management and staff.
10. Reviewing all contracts to ensure that:
 - a) Contractors and others doing business with the Commission have adequate insurance and meet MOSHA requirements.
 - b) The Commission is held harmless for other's actions.
11. Providing recommendations to the Secretary-Treasurer on waivers of insurance for vendor contracts.
12. Providing oversight of claims and administration of the MCSIP and commercial insurance programs.
13. Reconciling Risk Management Fund activities with the Department of Finance. Reconciliation shall include activities such as review of actuarial projection claims and other Risk Management controls.

The Department of Finance:

The Department of Finance shall provide financial reporting services; have custody of management of the Intra-governmental Risk Management Fund; and with the Executive Director, have overview fiscal responsibility for the program.

With the Executive Director, the Secretary-Treasurer evaluates insurance needs and recommends coverages to the Commission. The Secretary-Treasurer may approve waivers of insurance after consultation with the Risk Management and Safety Office, Department of Human Resources and Management.

Under the general direction of the Secretary-Treasurer, the responsibilities of the Department of Finance shall include:

1. Providing to the Commission, annual actuarial evaluations of the Risk Management Fund.
2. Providing annual financial projections and financial analysis of Risk Management Fund activities.
3. Developing an annual budget for the Risk Management Fund with advice from the Department of Human Resources and Management.
4. Assisting the Department of Human Resources and Management in their reconciliation of the Risk Management Fund activities.

Office of the General Counsel:

The General Counsel shall provide advice and support on legal matters affecting the Commission's risk management program. Under the direction of the General Counsel, the department's responsibilities shall include:

1. Providing advice, counsel, and support for the loss recovery program of the Department of Human Resources and Management.
2. Ensuring that the Commission is advised of all legal claims that are under the purview of the Risk Management Fund.
3. Ensuring that the Risk Management Fund of the MCSIP receives the support of Commission employees and assets to properly defend actions against the Commission.
4. Ensuring, where proper, that court actions are initiated against persons or organizations whose negligent, intentional, or otherwise unlawful acts have resulted in monetary loss to the Commission.
5. Providing oversight and coordination for the Commission of litigation cases, the settlement of those cases and where appropriate, settlement of non-litigation cases that are handled by the Risk Management Fund of the MCSIP.

Safety Committees:

The Commission hereby establishes a safety committee in each county, of which Risk Management and Safety Office staff shall be members. The chair of each committee shall be designated by Department Heads. The chair shall ensure that the committee consists of volunteer members representing a cross-section of each County's activities. The safety committee is responsible for assisting with departmental safety and training, and providing ideas to Department Heads on ways for improving and sustaining the Commission's loss control efforts. The safety committee may provide incentives and recognition for notable contributions to the area of safety awareness.

Individual Employees:

Employees are expected to exercise workplace safety and take precautions to minimize the potential for injury or damage.

WORKPLACE SAFETY

AUTHORITY	This Practice was originally approved by the Commission on January 20, 2004. The Practice was last amended by the Acting Executive Director on March 25, 2019. .
APPLICATION	This Practice applies to all employees, volunteers, and Department Heads.
PURPOSE & BACKGROUND	<p>This Practice was developed to establish an agency-wide policy that promotes workplace safety and outlines responsibilities for compliance with safety regulations. This Practice also provides the authority for issuing and updating safety guidelines through Administrative procedures:</p> <ul style="list-style-type: none"> • March 25, 2019: Amended to update references to relevant policy documents.
REFERENCES	<ul style="list-style-type: none"> • Title 29 Code of Federal Regulations (CFR) Labor. • Title 49 Code of Federal Regulations (CFR) Transportation – Federal Motor Carrier Safety Regulations (DOT). • Code of Maryland Regulations. • All applicable federal, state, and local mandates related to workplace health and safety. • M-NCPPC Administrative Practice 2-16, “Seasonal/Intermittent, Temporary, and Term Employment. • M-NCPPC Administrative Practice 2-21, Risk Management. • M-NCPPC Administrative Practice 6-10, M-NCPPC Vehicle Use Program • M-NCPPC Administrative Procedure 04-04, Risk Management and Safety Manual. • M-NCPPC Notice 11-08, Announcement, Preparation, Staffing, and Compensation During M-NCPPC Closings and Emergencies
POLICY	The Commission is committed to providing all employees a healthful and safe environment in which to work while complying with all federal, state and local occupational safety and health regulations. The Commission will take all steps necessary to prevent any employee, member of the public, or person(s) doing business with the Commission from being subjected to safety or health risks. To this extent, each employee is expected to observe and adhere to Commission safety policies and procedures designed to prevent accidents, illnesses and injuries.

RESPONSIBILITIES

Department Heads

The Department Heads shall help ensure safe facilities and programs through the implementation of, and compliance with, the Commission's safety policies and procedures. Department Heads are responsible for:

- Supporting Commission-wide safety programs and initiatives;
- Ensuring that employees/supervisors comply with established Commission policies on safety and health;
- Ensuring that employees attend necessary safety education/awareness training;
- Ensuring facilities comply with established safety standards;
- Taking immediate remedial action to remove identified hazards in the workplace; and
- Handling violations of policy in a consistent and timely manner to include appropriate disciplinary action.

Department of Human Resources and Management

The Department of Human Resources and Management is responsible for ensuring that: (1) the Commission complies with all applicable safety and health regulations, (2) the departments receive relevant safety and health information & training, and (3) known risks or violations of safety & health policies and procedures are handled promptly and consistently.

Employees

Employees are expected to carry out duties in a manner that promotes safe practices. Employees shall refrain from unsafe behaviors and immediately report any concerns of safety to their supervisor.

VIOLATIONS OF POLICY

Violations of workplace safety policies and procedures are subject to disciplinary action, up to and including termination. Disciplinary actions shall be handled in accordance with the Merit System Rules and Regulations, Workplace Conduct and Discipline Chapter; applicable Collective Bargaining Agreements; and Commission Practice 2-16, Contract Employment: "Seasonal/Intermittent, Temporary, and Term Employment," Discipline Section.

Violations also may result in applicable fines and criminal prosecution by external compliance agencies.

PROCEDURES

The Executive Director, in consultation with Department Heads, shall issue Administrative Procedures that promote the highest level of workplace safety and compliance. The Risk Management and Safety Office, Department of Human Resources and Management shall maintain adopted Administrative Procedures.

ADMINISTRATIVE PROCEDURES 04-04, RISK MANAGEMENT & SAFETY MANUAL

AUTHORITY/PURPOSE

The Risk Management and Safety Manual is issued as an Administrative Procedures document to provide procedural guidance for the implementation of adopted Administrative Practices 2-21, Risk Management and 2-36, Workplace Safety. The Manual updates and replaces the Risk Management Manual adopted and issued in 1979 and codifies existing stand-alone policies and procedures related to risk management and safety programs and activities. The Acting Executive Director approved minor updates to the Manual on March 25, 2019, as described in the Purpose/Background section.

APPLICABILITY

The programs contained in this Manual shall apply to all employees including Merit System and contract employees, volunteers, and appointed individuals. In the event that any portion of the Manual conflicts with a Collective Bargaining Agreement, the Agreement shall prevail for members of the respective collective bargaining unit.

BACKGROUND

Since initial adoption, these Procedures have been amended as follows:

- March 25, 2019: Minor amendments made to add References and update sections on (i) Pesticide and Pest Management requirements for the proper handling, storage, and application of pesticides and use of Integrated Pest Management (IPM) strategies to manage pests, and (ii) Personal Protective Equipment usage requirements.

REFERENCES

- M-NCPPC Administrative Practice 2-21, Risk Management
- M-NCPPC Administrative Practice 2-26, Controlled Substance & Alcohol-Free Workplace
- M-NCPPC Administrative Practice 2-36, Workplace Safety
- M-NCPPC Administrative Practice 6-10, M-NCPPC Vehicle Use Program

RESPONSIBILITY

Executive Director

Is authorized to issue Administrative Procedures for the implementation of Commission approved policies Administrative Practices 2-21, Risk Management and 2-36, Workplace Safety. Administrative Procedures are approved by the Executive Director after consultation with Department Heads.

Risk Management and Safety Office is responsible for maintaining and administering the programs and directives contained within the Risk Management and Safety Manual. The Office shall monitor the contents of the Risk Management and Safety Manual and recommend to the Executive Director, any updates which are required. The Office is responsible for communicating the adopted Administrative Procedures through training and written guidance, and responding to any questions related to the contents of the Manual.

Managers are responsible for ensuring that employees under their supervision understand the Workplace Safety and Risk Management policies and responsibilities. Managers shall implement Administrative Procedures for safety programs relevant to their work units and make certain that employees comply with established safety policies.

Employees are responsible for following requirements of established safety and risk policies and procedures.

PROCEDURES

See "**Table of Contents**" for a full listing of program procedures.

M-NCPPC Emergency Notification and Accident Reporting Procedures
(QUICK REFERENCE GUIDE)

The following Procedures provide instructions for critical first response including notification of appropriate personnel in the event of emergencies, accidents and other critical events. These Procedures supplement facility-specific Emergency Action Plans (EAPs), which address on-site emergency preparedness and response actions. These Procedures along with the EAP should be completed by the facility coordinator/manager and communicated to all assigned employees. The document should also be posted in prominent locations within your facility for easy access. The documents must be reviewed every six months or earlier as conditions warrant. Questions regarding these Procedures should be directed to the Risk Management & Safety Office.

For Emergencies Involving:

Fatalities, Serious Accidents, Major Damage to M-NCPPC Properties, and Other Life-threatening Situations

1. Call 911
 - State the nature of the emergency and answer all questions.
 - If a phone is not available, employees may use available two-way radios in M-NCPPC vehicles to report the emergency to the internal dispatch unit.

2. Request that 911 transfer your call to M-NCPPC Park Police or call Park Police directly.

MC Park Police: 301-949-3010
PGC Park Police: 301-459-3232

The Park Police will coordinate with other law enforcement agencies, provide security, investigate the incident and, if necessary, complete an incident report.

3. Contact your immediate supervisor

*The Manager/Supervisor will implement departmental protocol and contact:
(Complete in advance)*

Division Chief: _____

Phone Number: _____

Department Head: _____

Phone Number: _____

The Division Chief/ Department Head will notify Public Affairs, if appropriate (see attached #'s).

4. Contact the Risk Management and Safety Office
(See attached emergency contact list for business and after hour phone numbers).

The Office will coordinate with applicable regulatory agencies, legal resources, and claim contacts.

QUICK REFERENCE GUIDE

For All Events:

Work Related Injuries Sustained by Employees

1. First report of injury must be filed by the employee's supervisor within 24 hours of learning of the injury. Reports are filed telephonically by calling 1-888-606-2562.
2. Contact the Risk Management/Safety Office for necessary coordination of investigation and employment actions. (See attached emergency contact list.)

Incidents Related to Park Patrons, Commission Facilities and/or Property Damages (fire, flood, etc.), Auto Accidents

If incident involves a fatality, serious injury, fire or major property loss requiring use emergency notification procedures (Page 17).

For all other incidents:

1. The department must contact the Risk Management/ Safety Office (see attached emergency contact list) within 24 hours of learning of the incident.
2. Complete the appropriate [Accident Reporting Form](#) from [InSite](#).

The Risk Management and Safety Office will coordinate claim investigations, appraisals, and determination of liability following departmental reporting of claims.

Hazardous Material/Chemical Spills, Blood-borne Pathogen Exposure, or Other Questionable Hazards

1. Contact the Risk Management/Safety Office for necessary coordination of investigation and employment actions. (See attached emergency contact list)
2. The Risk Management/Safety Office will assist in coordinating a response, as needed, by external resources, such as MDE/EPA, MOSH, Gallagher Bassett, Secure Medical, etc.

Handling of Evidentiary Items on Park Property

The Park Police is responsible for incidents involving drugs, narcotics, weapons and other evidentiary crime related or illegal items found or recovered on park property or within its facilities.

Pandemics/Epidemics

In the event of possible health outbreaks, epidemics/ pandemics (such as H1N1), Departments must contact the Risk Management/Safety Office which will coordinate necessary review by local/state health officials and medical providers to address the condition and prevent possible spread of disease.

1. Prince George's County Health Dept.: 301-583-3750
2. Montgomery County Health Dept.: 240-777-4200

QUICK REFERENCE GUIDE, continued

Drug and Alcohol Testing

Commission policy requires post-accident drug/alcohol testing following an accident involving damage to Commission property or injury to employees/third parties.

1. Please contact the applicable Risk Management and Safety Office representative **immediately** following all vehicular accidents to ensure compliance with policy and to determine whether drug/alcohol testing is required.

Risk Management /Safety Representatives

After hours or 24 hour basis

Call: 301-275-5125

Backup: 301-275-5126 or 301-395-0563

2. If testing is required, the Risk Management/Safety Office will coordinate necessary testing on a 24-hour basis, seven (7) days a week. The supervisor shall arrange to have the injured employee report to the designated testing facility within eight (8) hours of the accident.

If the injured employee is hospitalized, the Risk Management and Safety Office will make arrangement for testing to be conducted at the hospital.

Crisis Counseling Services

The Commission's Employee Assistance Service (EAP) is available for free, confidential counseling to Commission employees on a 24 hour basis.

Employee-Initiated Referrals

Employees may contact 1-855-286-1678

Supervisor- Initiated Referrals

Supervisors may make mandatory individual or group referrals for counseling or crisis intervention.

Supervisors may arrange mandatory referrals by contacting the Employee/Labor Relations Office at 301-454-1700.

Inquiries from the Media/Press

Direct all inquiries to the respective spokesperson for the respective County (see business hours and contacts on Page 20).

QUICK REFERENCE GUIDE, continued

Emergency Telephone Numbers

M-NCPPC Park Police Divisions

- Montgomery County 301-949-3010
- Prince George's County 301-459-3232

Risk Management and Safety Office

Risk and Safety Manager	(work) After hours	301-454-1693 240-393-0419
Safety Specialist	(work) After hours	301-454-1682 301-275-5125
Safety Specialist	(Work) After hours	301-454-1681 301-275-5126
Property &, Auto Damage/ General Liability Claims	(work)	301-454-1686
Workers' Compensation Claims (Employee Injuries)	(work)	301-454-1692

General Counsel Offices

Office of the General Counsel (Main)		301-454-1670
Montgomery County		301-495-4646
Prince George's County		301-952-4501

Media/Press Inquires:

Montgomery County Planning	(work) After hours	301-495-4602 301-325-9963
Montgomery County Parks	(work) After hours	301-650-2892 301-949-8010
	(work) After hours	301-650-2866 301-949-8010
Prince George's County Planning	(work) After hours	301-952-4314 301-385-7296
Prince George's County Parks and Recreation	(work) After hours	301-446-3306 240-417-9865

This Emergency Contact List supplements the Crisis Management Plan, which has been developed for each facility

Emergency Telephone Numbers:

Emergency Medical Services	911
Fire	911
Park Police – Montgomery County Division	301-949-3010
Park Police – Prince George’s County Division	301-459-3232

Hazardous Materials Incidents:

Montgomery County Fire Department	911
Prince George’s County Fire Department	911

M-NCPPC Risk Management and Safety Numbers:

Risk Management	301-454-1693
Safety	301-454-1699 301-454-1682 301-454-1681
Workers’ Compensation	301-454-1692
Liability/Property Insurance Claims	301-454-1686

M-NCPPC Other Important Numbers:

General Counsel	Main	301-454-1670
	Montgomery County Planning	301-495-4646
	Prince George’s County	301-952-4501
Public Affairs	Montgomery County Planning	301-495-4507
	Montgomery County Parks	301-650-2866
	Prince George’s County Planning	301-952-4314
	Prince George’s County Parks/Rec	301-446-3306

External Numbers:

MD Department of Agriculture Pesticide Regulation	410-841-5710
MD Department of Environment MDE (after hours)	410-537-3000 800-633-6101
Miss Utility - Call Before You Dig	811 or 800-257-7777
Prince George's County Health Department	301-583-3750
Montgomery County Health Department	240-777-1755
National Capital Poison Center	800-222-1222
United States Coast Guard	202-372-4000

SECTION 2.03

Emergency Action Plans

The Commission has implemented this directive to prepare for foreseeable emergency situations and workplace emergencies. The agency has moved to site-specific plans that are updated with each facility on a regular basis. This program complies with Title 29 Code of Federal Regulations (CFR) §1910.38, Employee Emergency Plans and §1926.35, Employee Emergency Plans.

Purpose

The purpose of this directive is to maintain a high level of responsiveness to emergency situations.

Applicability

This directive applies to all Commission employees, properties and worksites.

Emergency Action Planning (EAP)

No one expects an emergency or disaster to affect him or her—or the work area. Emergencies and disasters can strike anyone, anytime and anywhere. A workplace emergency is an unforeseen situation that: threatens employees and the general public; disrupts or shuts down part or all of the Commission; or causes physical or environmental damage. Emergencies may be natural or manmade and include the following:

- Floods
- Hurricanes
- Tornadoes
- Fires
- Toxic gas releases
- Chemical spills
- Terrorism
- Radiological accidents
- Explosions
- Civil disturbances
- Workplace violence resulting in bodily harm and trauma

Each M-NCPPC facility shall maintain a site-specific emergency action plan (EAP) that must be updated on a regular basis. An EAP details the actions employers and employees must take to ensure employee safety from fire and other emergencies. Departmental emergency action plan shall be comprehensive and address all specific issues for the employees and the department that may arise during an emergency, as well as the conditions of the worksite (e.g., are their extraordinary hazards present, does your building have a fire alarm system, etc.)

When developing an EAP, it's a good idea to look at a wide variety of potential emergencies that could occur in the workplace. A hazard assessment should be conducted to determine what, if any, physical or chemical hazards in the workplace could cause or exacerbate an emergency, or impede emergency response efforts. **A Hazard Assessment Checklist is available from the Risk Management and Safety Office (Appendix A).**

The checklist is only a tool to assist with identifying the hazards in your work area or building. It is not meant to be part of your Emergency Action Plan. If you have more than one worksite, each site should have an emergency action plan developed that is specific to the conditions at that site. It should be **posted and highly visible**.

At a minimum, your emergency action plan must include the following:

- A preferred method for reporting fires and other emergencies;
- An evacuation policy and procedure;
- Emergency escape procedures and route assignments, such as floor plans, workplace maps, and areas of refuge;
- Names, titles, departments and telephone numbers of individuals both within and outside your building to contact for additional information or explanation of duties and responsibilities under the emergency plan;
- Procedures for employees who remain to perform or shut down critical plant operations, operate fire extinguishers or perform other essential services that cannot be shut down for every emergency alarm before evacuation; and
- Rescue and medical duties for any workers designated to perform them.

There shall be a designated assembly location and procedures to account for all employees after an evacuation.

Specific elements must be included in an Emergency Action Plan (EAP). This program includes a model plan to assist departments in the development and implementation of their EAP.

Emergency planning requires 3 elements:

1. Written Emergency Action Plan	An Emergency Action Plan program template is available from the Risk Management and Safety Office. The template can be used as a formatted guide for developing an Emergency Action Plan.
2. Alarm Systems	Methods should be established for alerting workers in the event of an emergency. If an audible alarm is used, it must be distinctive from any other type of alarm used in the building. In buildings where no fire alarm system is present, a method of verbal communication must be established to notify building occupants.
3. Training	All employees must be trained to assist in a safe and orderly evacuation in the event of an emergency. All those covered by the plan should be trained at the following times: <ul style="list-style-type: none">– Initially when the plan is developed.– Whenever an occupant’s responsibilities or designated actions under the plan change.– Whenever the plan is changed.– Initially when first hired or assigned to the Department. General training for all employees should address the following: <ul style="list-style-type: none">– Individual roles and responsibilities;– Threats, hazards and protection from hazards;– Notification, warning and communications procedures;– Means for locating family members in an emergency;– Emergency response procedures;– Evacuation, shelter and accountability procedures;– Location and use of common emergency equipment; and– Emergency shutdown procedures.

Fire and other Emergency Drills

Once you have reviewed your emergency action plan with your employees and everyone has had the proper emergency response training as stated in the previous section, it is a good idea to hold practice drills as often as necessary to keep employees prepared. The Risk Management and Safety Office can assist you with drills and involve outside agencies such as the Fire Department and Park Police.

Fire drills are a vital part of a comprehensive campus fire safety program. Drills are held to familiarize occupants with drill procedures and to make the drill a matter of established routine.

- Fire drills must be conducted annually in all Commission facilities with regular occupancy.

All fire drills held by the Commission **will be** announced and preplanned.
If a fire alarm sounds and you have not been notified prior to the alarm that it is a drill, take immediate action, evacuate the building and protect yourself.

General Evacuation Procedures

When evacuating your building or work area:

- Contact the Park Police and the Emergency Evacuation Plan Captain for your facility. Each facility must have an Emergency Evacuation Plan Captain. (There also shall be two "alternates" that can also be utilized as an emergency coordinator.
- Stay calm, do not rush, and do not panic.
- Safely stop your work.
- Gather your personal belongings if it is safe to do so. (Remember take prescription medications out with you if at all possible; it may be hours before you are allowed back into the building.)
- If safe, close your office door and window, but do not lock them.
- Use the nearest safe stairs and proceed to the nearest exit. Do not use the elevator.
- Proceed to the designated Emergency Assembly Area and report to your "roll taker".
- Wait for any instructions from emergency responders; i.e., police, fire, etc.
- Do not re-enter the building or work area until you have been instructed to do so by the emergency responders.
- Make sure any disabled employees have someone to assist them exiting the facility.

Evacuation Procedures

A building occupant is required by law to evacuate the building when the fire alarm sounds. **Anyone causing a fire alarm to be activated falsely will be subject to discipline and/or legal action.** Be familiar with your building and the emergency exits. All rest rooms should be checked when evacuating the building by the Emergency Evacuation Plan Captain. (Power may go out and occupants in the rest room may require assistance.) All employees should know where all fire alarms are placed in the building. All employees should also be familiar with the location of all fire extinguishers.

Emergency Evacuation Procedures and Routes

Depending on the emergency situation, employees may be required to evacuate their specific work area or the facility. This should be under the direction of supervisory personnel or designated response personnel.

All Commission work sites shall establish primary and secondary means of egress to assembly points ('safe areas'), subject to pre-established means determined by clients, owners or primary contractors.

In an extreme emergency situation, it may be necessary to quickly evacuate the work site to a designated area.

- Primary and alternate escape routes from the work area or building shall be developed and maintained
- In the event of a toxic chemical release, employees shall evacuate upwind or across wind whichever is the most feasible

- All means of egress shall be continually maintained and free from all obstructions and impediments
- Evacuation routes shall not go through higher hazard areas. Included with the evacuation routes shall be designated assembly points.

As soon as possible after the evacuation and as often as deemed safe and necessary during the evacuation, the Park Police, Fire Department or the Risk Management and Safety Office shall make or direct a complete inspection of the work site to ensure that it is safe from the threats posed by the original evacuation hazard or unattended equipment left by evacuated employees.

Employee Evacuation Assembly Points and Headcount

Assembly points shall be developed in synergy with the established primary and secondary means of egress. These locations shall be act as "safe areas" for evacuated employees. Consideration should be given to the location of the assembly point as well as its ability to protect employees from the effects of the emergency condition as well as the associated weather conditions (i.e. time of day, temperature extremes, rain, snow, etc.)

- All evacuees shall gather at the designated assembly area(s). A list of primary and alternate designated safe areas shall be included along with the emergency escape route assignments
- Assembly points shall be at a safe distance from the building and/or work site; well off roadways, fire lanes, and other emergency access routes
- Once the evacuees have gathered, it is necessary to have a means of accounting for personnel during an evacuation
- The Emergency Evacuation Plan Captain shall be responsible for accounting for personnel and informing the Fire Department of those persons unaccounted for

Emergency Evacuation Plan Captain Responsibility

The emergency coordinators shall establish procedures for safe and rapid evacuation of their respective offices and for assembling persons in designated areas away from the building. (a) Supervisors will call the roll from the rosters of employees for their particular office. (b) If employees on duty fail to answer the roll calls, the supervisors shall immediately notify the Fire Department or Police Department personnel on the scene. Re-entry into the building to search for missing employees or visitors shall be conducted by Fire Department or Police Department personnel, ONLY. (c) Employees will only re-enter the building after it has been rendered safe and told so by their Emergency Coordinator, via the Fire Department or Police Department personnel.

Severe Weather Procedures

Severe weather may come in the form of hurricanes, floods, lightning storms, tornadoes, snowstorms etc. Weather related emergencies can cause some of the most catastrophic emergency conditions we encounter.

All worksites shall evaluate their geographic area and incorporate responses to address appropriate foreseeable weather conditions in their area of operation, as an Addendum to this policy section.

Additional requirements include:

- All work sites with offices shall have a means to assure they are provided with as much advance warning of adverse weather conditions as possible (e.g. weather radio providing information regarding severe weather warnings issued by the National Weather Service)
- The supervisor is responsible for maintaining up-to-date information regarding approaching storms. They shall provide adequate warning to allow the appropriate individuals to secure the equipment and materials under their jurisdiction

- All supervisors shall be responsible for ensuring that all employees follow these procedures
- Safe locations shall be designated for employees in the event of tornadoes
- The supervisor shall follow the instructions of local authorities and the weather service so that the necessary precautions can be taken in the event of severe weather

Tornado and Hurricane Procedures

When a tornado watch has been issued by the National Weather Service, the weather page will sound, followed by a weather bulletin with further information. At that point, the Facility Manager, the Risk Management and Safety Office and Park Police will monitor the National Weather Service Reports. The Facility Manager shall be responsible for alerting employees to tornadoes. The Commission shall provide emergency shelter in the event of a tornado/hurricane in conjunction with local government agencies.

Upon notification of a tornado, all employees are responsible for evacuating to their assigned shelters in a tornado emergency. Emergency shelters should be located in lower levels away from windows. The following is a list of shelter assignments for this facility:

Hazardous Materials Procedures (chemical spills, toxic gas releases, etc.)

If you witness a hazardous material spill, evacuate the spill site and warn others to stay away. Call 9-911 from an office phone or 911 from a public telephone. Also notify the Park Police and the Risk Management and Safety Office to report the spill. If you can determine that the spill is not life-threatening, follow the procedures outlined below.

If you are a hazardous material user, you should be trained on the proper use and storage of hazardous materials. This training should include hazard information, proper procedures for preventing spills, and emergency procedures when a spill occurs. A current copy of the **North American Emergency Guide Book for Hazardous Materials** should be on the site. (Evacuation distances for spills are listed in this manual in the "Emergency Response Guide" section).

If you as a user spill a hazardous material or materials:

Leave the area of the spill first and proceed to a safe location nearby. Then you need to assess if you have the proper training and protective gear to clean up the spill.

If you are able to clean up the spill, follow the proper cleanup procedures and use proper personal protection.

Manage the generated waste as appropriate. Consult the Fire Department if necessary.

Isolate the spill area to keep everyone away, and post signs as necessary.

If you are in doubt as to the dangers of the hazardous material that has been spilled contact the Risk Management and Safety Office.

Material Safety Data Sheets (MSDS)

Each Commission facility shall compile an MSDS for each chemical that is used and stored within the facility. MSDS's are a printed description of the chemicals used in the workplace. These sheets provide the necessary information to use the chemicals safely and how to handle chemical accidents. The MSDS's include information such as product name, chemical abstract service number(s) (CAS), ingredients, physical data, fire and explosion hazard data, environmental and disposal information, health hazard data, first-aid instructions and handling precautions.

Chemical Inventory List (CIL)

Each Commission workplace shall compile a chemical inventory list that includes all of the hazardous chemicals used and stored in the facility.

Safety Precautions

Approach Cautiously from Upwind

Resist the urge to rush in; others cannot be helped until the situation has been fully assessed.

Secure the Scene

Without entering the immediate hazard area, isolate the area and assure the safety of people and the environment, keep people away from the scene and outside the safety perimeter. Allow enough room to move and remove your own safety equipment.

Identify the Hazards

Placards container labels, shipping documents, material safety data sheets, and identification charts are valuable information sources. Evaluate all available information and consult the recommended guide to reduce the immediate risks. Additional information, provided by the shipper or obtained from another authoritative source, may change some of the emphasis or details found in the emergency guide. Remember that the emergency guide provides only the most important and worst case scenario information for the initial response in relation to a family or class of dangerous goods. As more material-specific information becomes available, the response should be tailored to the situation.

Assess the Situation

Consider the following:

Is there a fire, spill or leak? What are the weather conditions? What is the terrain like? Who / what is at risk: people or property or the environment? What actions should be taken. Is evacuation necessary? Is diking necessary? What resources (human and equipment) are required and readily available? What can be done immediately?

Obtain Help

Advise your emergency coordinator to notify the Park Police and the fire department.

Decide on the Entry

Any efforts made to rescue persons, protect property or the environment must be weighed against the possibility that you could become part of the problem. Enter the area only when wearing appropriate protective gear.

Respond

Respond in an appropriate manner. Establish a command post and lines of communication. Rescue casualties where possible and evacuate if necessary. Maintain control of the site. Continually reassess the situation and modify the response accordingly. The first duty is to consider the safety of people in the immediate area, including your own.

Above All

Do not walk into or touch spilled material. Avoid inhalation of fumes, smoke and vapors, even if no dangerous goods are known to be involved. Do not assume that gases or vapors are harmless because of lack of a smell -odorless gases or vapors may be harmful.

Bomb Threats

All bomb threats shall be taken seriously.

Immediately notify the Park Police and then the supervisor at the work site of the threat, who then shall contact other parties, as necessary.

Once the bomb threat has been received, a supervisor shall decide whether to evacuate, based on consultation with the Park Police and the Fire Department.

In all cases, two-way radios etc. shall be shut off in the affected area, due to the fact that the frequencies used by them could activate the device.

In the event an employee receives a bomb threat, the employee should try and remain calm, and ascertain as much information as possible on the caller, and their intentions.

A sample Bomb Threat form is included with this program. **(See Appendix C)**

Fire Procedures

A building occupant is required by law to evacuate the building when the fire alarm sounds. If a fire emergency occurs, employees have a responsibility to take immediate and appropriate action to take care of themselves. There is no employer expectation for employees to attempt to extinguish a fire or otherwise stay in their workplace for any reason upon being notified of a fire emergency.

From a safe location, call 9-911 from an office phone or 911 from a public phone, and report the fire. Also, notify the Park Police. Evacuate the building as soon as the alarm sounds and proceed to the designated Emergency Assembly Area. On your way out, warn others that are nearby. Move away from the fire and smoke.

Close doors and windows if time permits. Touch closed doors; do not open them if they are hot. Use stairs only, do not use elevators. Move well away from the building and go to your designated Emergency Assembly Area. Do not re-enter the building or work area until you have been instructed to do so by the emergency responders. Have a designated person to assist with any disabled or handicapped employees. In the event of heavy smoke inside the building, stay low to the ground or crawl out. Know where all fire alarms and emergency exits are located in your building.

Site Specific Information:

The following information is relevant and critical information that is required for each and every MNCPPC facility / building.

(1) An "off-site" location shall be designated for all employees to respond to in the event of an emergency or evacuation. This "off-site" location should be known to all Commission employees. (This will aid in the accountability procedures for Commission employees).

(2) Floor Plan of the building / facility: This should show the escape routes, fire alarm /extinguisher locations, stairways, etc.

(3) A current list of names and phone numbers, (work and home), shall be on file for the emergency coordinator and/ or supervisors. A list of all employees pager and cell phone numbers shall also be available and current. These lists shall updated quarterly and submitted to the Park Police and the Risk Management and Safety Office. **(Appendix B)**

(4) All employees who are familiar with the operation of the building, i.e. heating, air conditioning, alarm system, maintenance, etc., shall work with the emergency coordinator and police in the event that any facility needs to be evacuated and shut down. (This is particularly important in the event of a biological hazard). The Department Head or designee will determine whether to maintain operations or a portion

thereof and have a pre-determined list of essential personnel. The Department Head or designee will also determine the essential use of Commission vehicles during an emergency situation.

(5) The appropriate county ADC Map, shall accompany this emergency manual. The appropriate map page for each specific facility should also be readily available, for use with the "evacuation over-lay" transparency.

(6) Each Commission facility, along with the fire department, shall have a chemical inventory list and all material safety data sheets for the chemicals for each particular facility. This data sheet will list any hazardous materials that are stored or utilized at each facility and a map of each facility will be available showing the location(s) of all stored hazardous material.

(7) Certain Commission facilities may be designated as "Emergency Shelters". These locations will be determined on a case-by-case basis. In the event a facility is designated as a "Emergency Shelter", an inventory of emergency supplies and equipment shall be maintained by the emergency coordinator or a designee, for that facility.

(8) Special Considerations / Protection of Vital Records: The emergency management plan should include a program for selecting and safeguarding vital records. These records vary depending on the division; however, there are certain fundamental records such as financial records, legal documents, etc. The most common method is to set up a back-up system for vital records. Most involve storing copies at an area away from the normal location.

Emergency Evacuation Plan Captain Responsibility

(1) Emergency Evacuation Plan Captain's shall be designated for each facility, with the responsibility of safely evacuating the facility and coordinate the accountability of Commission employees. The emergency coordinator shall be familiar with the facility Emergency Action Plan and evacuation procedures. The emergency coordinator, along with Commission employees, should assist with the safe evacuation of any Non-Commission employees that may be in their facility. In addition to the emergency coordinator for each facility, there shall also be two designated "alternates" who may also be utilized as an emergency coordinator.

(2) The Emergency Evacuation Plan Captain shall contact the Park Police to coordinate training for employees at their facility. Drills and exercises should be preceded by training seminars or workshops, where participants are trained in the emergency situations.

(3) The Emergency Evacuation Plan Captain shall establish procedures for a safe and rapid evacuation of their respective facility and for assembling persons in designated areas away from the building. The emergency coordinator or designee shall be responsible for assisting with the evacuation of any handicapped employees. The emergency coordinator shall also be responsible for identifying all fire alarms, fire extinguishers, and emergency exits on the floor plan that is kept the facility emergency action plan.

(4) A list of all employees at each facility who are qualified and or certified to assist in first aid or CPR shall be maintained by the emergency coordinator.

(5) The Emergency Evacuation Plan Captain or designee, shall be responsible for maintaining employee names, phone numbers and CPR/First Aid information, for their particular facility. This shall be updated on a semi- annual basis.

(6) The Emergency Evacuation Plan Captain shall maintain an emergency mitigation response kit. This kit should contain the following:

Cell Phone	Emergency Plan
Employee Phone List/ Roster	Hazardous Materials Inventory List
Floor Plan	Vest or arm band for coordinator
Evacuation Log	Crisis Notification List
Flash Light	

Training

Training shall be provided to all employees at the time of their initial work assignment, annually thereafter (as a minimum) and if conditions on site change impacting the emergency plan. Training should address the following areas:

- The emergency action plan

- Emergency communications systems – both internal and external, as well as back-up system
- Emergency notification procedures and alarm systems
- Site evacuation plans and assembly points
- Specific training to designated employees who are required to direct emergency equipment to the area and assist in the emergency including roles/responsibilities and equipment operation procedures
- Employees required to respond to emergency situations as emergency technicians, etc. shall be trained appropriately as per regulatory standard 29 CFR1910.120 (q)(6)

Program Review and Evaluation

The effectiveness of emergency programs shall be evaluated and reviewed on an annual basis by the Risk Management and Safety Office. These activities shall include (as a minimum):

- Program evaluation
- Emergency simulation utilizing the emergency notification procedures, evacuation, and head count protocols

Appendices:

Appendix A – Emergency Action Plan Hazard Assessment Checklist
Appendix B – Employee Emergency Contact List
Appendix C – Disaster Supply Checklist
Appendix D – Emergency Contact List
Appendix E – Bomb Threat Checklist

Appendix A:



The Maryland National Capital Park and Planning Commission

Emergency Action Plan

Hazard Assessment Checklist

For Department Emergency Coordinators

The following hazard assessment tool is offered to departmental personnel that have an assigned role developing or implementing an Emergency Action Plan for their department or work unit. This tool is designed to help these Emergency Coordinators assess the general safety of departmental work areas and preparedness of their department in the event of an emergency. Each building should be evaluated separately.

1. Building Name:
2. Street Address:
3. Department Name:

The first 16 items address conditions that are likely to remain constant from year to year. As your department is restructured, relocated, and/or significant changes take place, these items will need to be readdressed. The remaining items should be reevaluated on an annual basis.

- All emergency roads and sidewalks used for emergency access can support the weight of emergency vehicles.
- All Commission properties have a unique and identifiable address.
- All emergency response units that service the Commission have updated street address and access maps for all buildings.
- Road closures impacting emergency access to buildings are regularly communicated to emergency responders.
- Fire extinguishers are provided in all Commission owned, operated and leased buildings.
- Fire hydrants are placed and oriented to enable prompt hookup with fire suppression apparatuses.
- Fire department connections are inspected regularly.
- Fire detection, notification and suppression systems are tested annually.
- Elevators are inspected regularly.
- Generators are inspected regularly.

Contact the Risk Management and Safety Office at 301-454-1681 or 301-454-1682 if additional assistance is needed.

General Information

1. This building is is not open/intended for public access.

If the building is open to the general public without access control, then it may be impossible to know how many people are actually present in the building at any given time. Under these circumstances, consider appointing floor wardens for each floor of the building, especially if the building does not have a central fire alarm system. The duties of the floor warden would include assuring that all persons on their assigned floor are aware of the building emergency and are evacuating the building.

If the building does have access control, then assure that a head count can be conducted at the assigned assembly location to assure that all employees are accounted for.

2. The doors in this building are are not controlled by a computerized security system.

In buildings that are open to the general public without access control, consider performing a security audit of the facility to evaluate how this open access might compromise building safety. Implement controls to reduce potential exposures/risks.

3. In addition to the evacuation path through "main entrances," alternate paths are:

All personnel should be familiar with both the main egress paths as well as at least one alternate path of emergency egress from the building. Because visitors to the Commission may not be familiar with our facilities, it is also recommended that emergency evacuation route signage be posted at each entrance to the building. Information on this signage can be obtained from the Risk Management and Safety Office.

4. Employees are are not required to wear identification badges.

Where the department can or wishes to control access by the general public, consider implementing an identification badge system. Implement controls to limit access to authorized personnel only and assure that departmental personnel are required to request positive identification from unknown persons in these work areas.

5. The closest outside telephone is located:

In some situations it may not be possible to call 911 prior to leaving the building. It is extremely important that another means of contacting emergency services has been identified outside the building that can be used in these situations.

6. This building is is not equipped with an elevator.

Many Commission elevators are equipped with emergency phones. These phones may link elevator occupants with police dispatch. Verify if your elevators have emergency phones, and assure that the purpose of these phones is explained during emergency action training. Also assure that occupants are aware that elevators should not be used during a building emergency.

The elevators have do not have automatic lobby recall when the fire alarm is sounded or transmitted.

If elevators have automatic lobby recall, this means that the elevator will automatically return to the lobby level if smoke is detected. Assure that personnel understand the recall function.

7. Emergency battery-powered lighting is is not provided in aisles, passageways, and evacuation paths.

Emergency lighting may consist of wall mounted fixtures with directional lamps or some lighting fixtures in your building may be equipped with battery back-up or powered by an emergency generator. Occupants should be informed of the types of emergency systems that are present in their building. If you need assistance with determining if your facility has emergency lighting, please contact the Risk Management and Safety Office.

8. The following equipment/materials /records located in this facility are critical to this department's operation:

If you lose power, are there types of equipment that the department just couldn't afford to lose? Are these protected by emergency power systems? Surge protection? Are they located in a fire safe area? Can they be better protected?

If a fire occurred, are there critical records or materials that the department absolutely must have to function? Does your department have a records management system where critical records are either stored off-site or duplicated with one set stored in a remote location?

Does your department have a business recovery plan? Has your department planned how it would resume normal business functions if the entire building/area were to be lost in a fire?

9. Telephones do do not require electrical service to operate.

If your telephones do require electrical service to operate, identify other means that can be used to summon emergency services, such as cell phones, emergency phones, and similar means.

10. This building does does not have a back up generator(s).

The following equipment is operated by an emergency generator:

Emergency generators may: (1) provide emergency lighting for safe egress, such as exit lights in stairwells and corridors; (2) provide power for fire control and safety equipment, such as fire pumps, communications systems, fire detection and alarm systems, and security systems; (3) provide power for critical equipment, such as sump pumps and elevators; (4) provide power to permit operation of at least a portion of the facility during the power outage, such as communication centers, fume hood exhaust systems, and public safety centers; (5) provide power for lengthy outages beyond the capacity of an Uninterrupted Power Supply System (UPS). It is important that the occupants of your building know what type of emergency power is available in their work area. If you need assistance determining if your building has emergency power, please contact the Risk Management and Safety Office.

11. Building entry/exit points do do not have egress control devices (for example, an alarm system that will only open the exit door after the latch has been depressed 15 seconds).

Egress control devices with a delayed-opening feature as described above are only allowed if the building is equipped throughout with an automatic sprinkler system or fire detection system; these devices must release upon activation of the sprinkler or fire detection system, loss of power to the device, loss of power to the building, or must open after no more than a 15 second delay which must sound an audible alarm in the vicinity of the door. A sign must be posted on the door stating, "Push until alarm sounds. Door can be opened in 15 seconds".

Door alarm devices that do NOT restrict the use of the door are permitted in all locations.

12. This building is equipped with the following types of alarms:

- | | |
|---|---|
| <input type="checkbox"/> Fire | <input type="checkbox"/> HVAC Malfunction |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Elevator Malfunction |
| <input type="checkbox"/> Smoke | <input type="checkbox"/> Water & Moisture |
| <input type="checkbox"/> Intrusion | <input type="checkbox"/> Gas Detection |
| <input type="checkbox"/> Fire-Suppressant | <input type="checkbox"/> Refrigeration Unit Malfunction |
| <input type="checkbox"/> Fire Panel Trouble Alarm | <input type="checkbox"/> Freezer Unit Malfunction |

Occupants must be informed of the types of alarm systems that are present in your building, and know how to respond to the various types of alarms listed above.

13. Building alarms notify which of the following:

- Building Occupants
- Park Police Dispatch
- Other Emergency Services
- Alarm Company
- Individual Employees

Occupants must be informed of the types of alarm systems that are present in your building, and know to whom these alarms will report.

14. Fire alarms notify building occupants by which of the following methods:

- Audible
- Visual Strobe or Flashing Lights
- No fire alarm in building

If your building does not have a fire alarm system, you must develop some system that can be used to notify all building occupants in the event of a building emergency. The use of air horns, phone-trees, floor wardens, or training occupants to pound on doors and yell 'fire' as they exit the building are all acceptable means to accomplish this. Contact the Risk Management and Safety Office for guidance.

15. If you have a building fire alarm, alarm pull-boxes are found in the following locations:

Fire alarm pull-boxes are generally located next to the entrances to stairwells and at the exits from the building. Occupants must be informed of the location of these devices and how they are used.

16. There are are not spaces inside the facility that people can use as an "Area of Refuge" until help can arrive?

Some newer buildings have defined 'areas of refuge'. In other buildings, exit stairwells or better-protected offices/areas may need to be used as an area of refuge. Always identify a main and a secondary area of refuge.
If persons with mobility impairments are present in your location, pre-plan where these persons can shelter until help can arrive and train floor wardens or building occupants to immediately notify emergency personnel that a person is located in an area of refuge and to provide the location. If this situation is relevant to your department/building, please contact the Risk Management and Safety Office for guidance.

Building Management

Y N

17. Does your building have a response team designated for all shifts? (If not, consider implementing such a team.)

Y N

If yes, has the response team developed a plan to follow in the event that the fire alarm is activated?

Y N

18. Are employees trained on what to do in the event that a fire is detected? (If no, training should be performed; contact the Risk management and Safety Office for assistance if needed.)

Y N

Are notification systems in place to notify building occupants to evacuate? (If no, and your building does not have a fire alarm system, a notification system should be developed and employees trained on this system.)

NOTE: The Commission does not conduct unscheduled fire drills. If the alarm sounds, treat it as an actual fire!

Y N

19. Does the building have an evacuation plan that addresses different types of events? (If no, this plan should be developed.)

Y N

Does the evacuation plan layout assigned meeting locations for occupants? (If no, this needs to be addressed in the plan.)

<input type="checkbox"/> Y <input type="checkbox"/> N	Are the meeting points hazard free and not overcrowded? (If no, this condition needs to be corrected.)
<input type="checkbox"/> Y <input type="checkbox"/> N	Can you reasonably conduct a 'head-count' at the meeting location to assure that all occupants have evacuated, or have other means (such a floor wardens) been implemented to assure the building has been cleared of all occupants? (If no, this needs to be addressed in the planning.)

Access Control

20. How are access restrictions communicated to potential visitors?

Y N 21. Is there a readily available directory of building occupants at the main entry?

Y N 22. Are any evacuation paths or egress doors normally locked or secured during normal business hours? These doors must open from the inside without use of a key or special knowledge.

Y N 23. Is there access control through lobby areas?

Y N If so, does the department verify the identity of employees, guests, visitors, messengers and delivery personnel?

Y N If so, are in-coming parcels and packages checked?

Y N 24. Is there access control and management into and through loading docks?

Y N 25. Is a log maintained of employees who might require assistance and the nature of the assistance that might be needed in an evacuation?

Y N Does the log indicate the typical working hours and where the individual works?

Your Facility: Management

26. How often does your department conduct fire response training?

Y N 27. Does your department have "alternate" or "substitute" response team members appointed? Consider coverage after normal working hours and when designated employees are off from work.

Y N Do the "alternate" and "substitute" response team members have their own, properly maintained, copies of the written plan?

Y N 28. Are all members of the response team trained to perform, at a minimum, the duties spelled out in the departmental emergency response plan?

Y N Are they provided with any necessary emergency supplies and equipment?

Y N 29. Does your department have a records management system (e.g., off site archival, duplication of critical records, etc)?

Y N 30. Does your department have a business recovery plan that addresses how departmental operations will be resumed in the event of a catastrophic event and in which priority order?

Y N 31. Are floor plans and space assignments up-to-date?

<input type="checkbox"/> Y <input type="checkbox"/> N	32. Have all personnel been trained to recognize and report suspicious packages?
<input type="checkbox"/> Y <input type="checkbox"/> N	33. Is there a protocol in-place for changing combination locks or other locking devices? - Key Control? - Password Control? - Can you account for all duplicate keys?
<input type="checkbox"/> Y <input type="checkbox"/> N	
<input type="checkbox"/> Y <input type="checkbox"/> N	
<input type="checkbox"/> Y <input type="checkbox"/> N	34. Are emergency medical and first aid supplies stocked and maintained, or are emergency telephone numbers posted to summon emergency services?
<input type="checkbox"/> Y <input type="checkbox"/> N	If first aid supplies are maintained, are these routinely checked and supplies rotated to assure freshness?

**The Building: Elevators, Stairwells and Egress Corridors
(Each Corridor, Stairwell and Evacuation Path Should Be Individually Reviewed)**

<input type="checkbox"/> Y <input type="checkbox"/> N	35. Are exits and stairwell locations clearly marked? (If “no”, contact the Safety Office for guidance.)
<input type="checkbox"/> Y <input type="checkbox"/> N	36. Are evacuation paths properly marked or posted? (If “no”, contact the Safety Office for guidance.)
<input type="checkbox"/> Y <input type="checkbox"/> N	37. Are all egress corridors and aisles kept free of obstructions including furniture, equipment and storage? (If “no”, this condition must be corrected.)
<input type="checkbox"/> Y <input type="checkbox"/> N	38. Are elevator lobbies clearly marked with signs indicating not to use elevators in emergencies? (If “no”, contact the Risk Management and Safety Office for guidance.)
<input type="checkbox"/> Y <input type="checkbox"/> N	39. Is there a provision for evacuation of disabled staff and visitors or are stairwells designated as an area of refuge or have other areas of refuge been identified? (If “no”, this condition needs to be addressed in your plan.)
<input type="checkbox"/> Y <input type="checkbox"/> N	40. Are the building alarms noticeable in stairwells and remote portions of the building? (If “no”, contact the Risk Management and Safety Office for guidance.)
<input type="checkbox"/> Y <input type="checkbox"/> N	41. Are the floor numbers indicated at each level in the stairwells? (If “no”, contact the Risk Management and Safety Office for guidance.)
<input type="checkbox"/> Y <input type="checkbox"/> N	42. Are there any items stored in the stairwells? Stairwells must always be kept clear of storage, and equipment, furniture and similar materials may not generally be stored in stairwells. If you need guidance with a specific situation in your building, please contact the Risk Management and Safety Office.
<input type="checkbox"/> Y <input type="checkbox"/> N	43. Are there obstructions in the stairwells? (If “yes”, contact the Safety Office for guidance.)

The Building: General Storage Issues/Areas

<input type="checkbox"/> Y <input type="checkbox"/> N	44. Is there any storage of hazardous materials or chemicals?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, are flammable or combustible liquids stored in approved flammables storage cabinets where required by Commission?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, are incompatible materials (for example, acids and bases) stored separately?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, are water-reactive chemicals/materials protected from sources of water?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, is there a fire extinguisher present that is suitable for the material/chemical stored in this location?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, is there appropriate spill response material on-site (in the building, lab or shop) to respond to small spills?
<input type="checkbox"/> Y <input type="checkbox"/> NA	If yes, do you have a spill response plan for hazardous materials? It is recommended all areas where hazardous materials are handled, stored and used include their spill response plan in their emergency response plan, and that this plan include personnel contact information that can be used in the event of an emergency.

Y NA Are flammable liquids dispensed outside of an approved chemical storage room? If yes, please contact the Risk Management and Safety Office for guidance.

Y N 45. Are compressed gases stored or used in the facility?

Y NA If yes, are the cylinders stored in a secured area where they aren't subject to tampering?

Y NA If yes, are cylinders stored outside of evacuations corridors and away from building exits?

Y NA If yes, are cylinders protected from sources of ignition, heat, sparks and other sources of potential damage?

Y NA If yes, are all cylinders secured to prevent overturning?

Y NA If highly toxic gases are stored or used, are these secured in approved gas cabinets and/or have detection systems been installed to sound an alarm in the event of a leak?

Y NA Are employees aware of how to respond to a potential gas leak?

If you answer "no" to any of questions 46 to 54, then the indicated hazard needs to be addressed by the department.

Y N 46. Are aisles/passageways clearly marked and kept free of obstructions?

Y N 47. Are shelving and cabinets adequately secured to prevent containers from falling?

Y N 48. Is there any apparent danger of shelving collapse?

Y N 49. Are all stored materials stacked in stable piles that will resist overturning?

Y N 50. Is there any clutter or improper storage (e.g., storage of files or waste paper, or tools or other equipment)?

Y N 51. If equipment is unstable or could be easily overturned, has it been secured to prevent overturning?

Y N 52. Are lockers and closets locked and accessible only to authorized personnel?

Y N 53. Is the building free of evidence of smoking in the area/building?

Y N 54. Is the amount of combustible materials (e.g., paper, plastic, etc.) stored in the location kept to a minimum?

Y NA Are records routinely archived with Records Management?

Y NA Are combustible waste materials removed on a frequent basis and not allowed to accumulate?

Y NA Are oily rags/materials stored in approved, covered containers?

Computer Rooms

Y NA 55. Are there any special fire suppression systems in computer rooms that present a potential danger to occupants if discharged? (If "yes", have all employees in this work area been trained on how they must respond if this system discharges to protect themselves? If yes, have employees been trained on reentry procedures if the fire suppression system does discharge?)

File Cabinets

Y N 56. Are file cabinets placed where they cannot tip over? (If "no", and a file cabinet is subject to tipping over, will it block the evacuation route from the area? If it could block the evacuation route, the cabinet should be relocated or secured.)

Y N 57. When file cabinet drawers are open, do they obstruct aisles or passageways? (If "yes", the cabinet should be relocated.)

Y N 58. Are file cabinets and file drawers that should be locked actually locked?

Hallways and Corridors

- Y N 59. Do the “panic bars” on egress doors work properly?
- Y N 60. Do all door-closing devices operate properly (e.g., does the door fully close and latch when released)?
- Y N 61. Are any doors propped or chocked open, preventing automatic closure? (If “yes”, occupants may be defeating a fire protection feature of the building, exposing all occupants to an increased risk. The role these fire protection features play should be emphasized during employee training; please contact the Risk Management and Safety Office for assistance as needed.)
- Y N 62. Are hallways and egress corridors free of obstructions (e.g., furniture, storage or equipment)? (Some hallways and corridor areas are designed to accommodate limited furniture and equipment, but in all cases the egress path must be clear and unobstructed, and improper storage must be removed and such use curtailed. Please contact the Risk Management and Safety office for assistance with evaluating your specific area if you identify what appears to be an improper use or obstruction of the egress corridor.)
- Y N 63. Are exit signs clearly visible from all locations, and do these signs accurately indicate the direction of travel to the exit? (If “no”, this should be reported to the Safety Office).
- Y N 64. Are doors that could be confused with an exit clearly marked as “Not an Exit”? (If “no”, this should be reported to the Risk Management and Safety Office).

Offices and Workspaces

- Y N 65. Is housekeeping satisfactory in all areas? (If “no”, this condition should be corrected by the department.)
- Y N 66. Are aisles and passageways kept continually clear of obstructions? (If “no”, this condition should be corrected by the department.)
- Y N 67. Are all hotplates, coffee warmers, or space heaters appropriate for use?
Do these devices have automatic shut off switches? If not, consider removing these devices from the work area.
Space heaters with an exposed heating element or other devices that develop a surface temperature high enough to ignite ordinary combustibles such as paper are not permitted on Commission property. Non-electric space heaters are not allowed in general office areas; contact the Risk Management and Safety Office for guidance.
- Y N 68. Are all areas free of conditions that would indicate an overload of the electrical system? (Conditions that would indicate a potential overloaded condition include: frequent tripping of breakers; use of multi-plug adapters; power-strips being plugged one-into-another to provide additional outlets in an area; and, electrical cords, plugs, receptacles or switches that are hot to the touch.)
- Y N Are multi-plug adaptors being used? If “yes”, these should be removed from service.
- Y N Are extension cords being used for temporary use only? If “no”, the premises wiring must be extended to provide an outlet in the location needed or the equipment should be relocated so that it will plug directly into a wall receptacle.
- Y N Is each power strip plugged directly into a wall outlet? If “no”, can the room layout be changed to meet this requirement? If not, the premises wiring must be extended.
- Y N Are cords running through walls and/or under doors? If “yes”, an alternate means of providing power in the location must be identified and these cords removed.
- Y N 69. Are empty offices or workspaces being used for storage? (If yes, this may represent a fire code violation and should be reported to the Risk Management and Safety Office).
- Y N 70. Are desktop computers, printers, faxing machines, copiers, bookshelves, file cabinets, and other office machines and devices that could fall and cause employee injury or block egress secured to prevent shifting or movement if there is seismic activity? (If “no”, these conditions should be

addressed by the department.)

Emergency Signage (For the following section, if the answer is “no”, the department should address the condition, whichever is responsible for the issue in question.)

- Y N 71. Are all emergency signs legible and easily seen?
- Y N 72. Will the signs be readily discernible and understandable under all lighting conditions?
- Y N 73. Are symbols or icons used on the signs understood?
- Y N 74. Are signs normally illuminated as intended?
- Y N 75. Is the backup illumination functioning as intended?
- Y N 76. Does the signage actually indicate the correct direction?
- Y N 77. Do EXIT signs actually indicate exits?
- Y N 78. Are exit doors clearly marked?
- Y N 79. Is there a clear sight line to EXIT signs from all locations?
- Y N 80. Where EXIT signage incorporates directional arrows, are the arrowed directions clear?
- Y N 81. Are emergency telephones, alarm pull-boxes, and other emergency equipment located where signage indicates?

Fire Extinguishers and Similar Equipment (For the following section, if the answer is “no”, the department should address the condition, whichever is responsible for the issue in question.)

- Y N 82. Have all (individual) fire extinguishers been properly maintained and serviced?
- Has it been recharged within the specified period?
 - Is the current charge within the recommended range?
 - Is the seal and inspection tag intact?
 - Is the monthly visual inspection being performed and documented (e.g., the tag is dated and initialed)?
- Y N 83. Is the fire extinguisher located at the entry to the space/area rather than at the opposite side?
- Y N 84. If wall-hung, can the fire extinguisher be easily reached and removed by any staff member?
- Y N 85. Are the locations of fire extinguishers clearly marked?
- Y N 86. Are employees aware of the location of all nearby fire extinguishers?
- Y N 87. Have employees been trained in their use? (If not, Portable Fire Extinguisher Training is available from the Risk Management and Safety Office).

If you need assistance evaluating any of the conditions outlined in this form, please contact the Risk Management and Safety Office at 301-454-1681 or 301-454-1682.

Appendix B:

Employee Emergency Contact List

Department:
Emergency Action Plan Coordinator:
Alternate:

Name	Work Phone	Cell Phone	Home Phone	CPR/First Aid Certification (w/ expiration date)

Appendix C:

Disaster Supply Checklist

Use this checklist to ensure you have all the supplies you need in the event of a disaster

- NOAA Weather Radio**
- First Aid Kit**
- Flashlight and Batteries**
- Waterproof Plastic Bags**
- Duct Tape**
- Camera and Film**
- Pens/Pencils/Paper**
- Non-perishable Foods (canned goods, cereal)**
- Water (1 gallon per person per day)**
- Generator and fuel**
- Extension Cords**
- Mops/Pails**
- Tool Kits (basic tools, gloves, etc.)**
- Emergency Contact List**

Appendix D:
Emergency Contact List

Keep this emergency contact list available for use in the event of an emergency. Attach a list of employee contact numbers to this list.

Park Police: _____

Fire Department: _____

Hospital: _____

Risk Management & Safety Office: _____

Building Maintenance: _____

Media Relations: _____

Telephone Company: _____

Gas Company: _____

Electric Company: _____

Appendix E:

Bomb Threat Checklist

- Record all information if you receive a bomb threat call.

**BE CALM. BE COURTEOUS. LISTEN. DO NOT INTERRUPT.
RECORD EXACT WORDS OF CALLER.**

- Note caller's ***voice characteristics*** and any ***background noises*** heard (i.e., male/female, crying/irrational, raspy, incoherent, well spoken, use of slogans, speech impediment, angry/calm, rapid/slow, taped, loud/soft/normal, language characteristics, excited, foul language, laughter, accent, disguised, street noises, aircraft, train, music, animal noises, voices, static, dishes, PA system, motors, machinery, church bells, office machines, etc.)

- Questions to Ask:

a. When is the bomb going to explode? _____

b. Where is the bomb? _____

c. What kind of bomb is it? _____

d. What does the bomb look like? _____

e. How did you find out about the bomb? _____

f. Why did you place it? _____

g. Attempt to obtain name, phone number, and address or location of the caller.

The Commission has implemented this Directive to prevent and minimize losses to the Commission, its employees and visitors.

PURPOSE

The purpose of this directive is to establish a program for the security of M-NCPPC buildings and facilities.

APPLICABILITY

This directive applies to all M-NCPPC employees.

POLICY

It is Commission's policy to prevent and minimize losses to the Commission and its employees and visitors.

PROCEDURES

The Office of the Executive Director (OED) will monitor security measures throughout the agency. The Montgomery County Superintendent of Parks will designate a member of the Department of Park and Planning to serve as Security Coordinator for buildings and facilities in the Montgomery County Parks System.

The Director of Parks and Recreation in Prince George's County will designate members of departmental staff to serve as Security Coordinators for all Commission buildings and facilities in Prince George's County, except those offices of the Commission located in the County Administration Building.

The Prince George's County Administrator for the Prince George's County Planning Board, acting for the Commission's Executive Director, will represent the Commission and coordinate with the County Government with respect to County security procedures, and advise the Commission offices and employees located in the County Administration Building of the County's security procedures.

The Executive Director will designate a Security Coordinator for the Bi-County Central Area Services.

Employees located in leased office space will comply with the lessors' security procedures, in addition to those established by the Commission.

Security Coordinators will prepare and implement security procedures and shall communicate all security procedures to employees in their respective areas. Security Coordinators shall notify the appropriate Park Police Headquarters of any significant security violation.

Security procedures for buildings and facilities should include the following:

Facilities

- Keys to facilities should be closely monitored. Only those requiring access **should** have keys to a facility.
- Keys must be returned if an employee leaves the Commission or has a change in position.
- Facilities should be checked daily upon opening and closing for broken or **worn** locks, doors, windows, gates, etc. Evidence of tampering should be reported to the Park Police.
- Facilities should be inspected prior to lock up to ensure that windows and doors are shut and locked, equipment is secured and turned off, and alarm systems are operational.
- Exterior lighting should be checked daily.
- Emergency contact phone numbers should be **posted** conspicuously, updated as needed, and copies provided to the Park Police and the Risk Management and Safety Office.

Commission Equipment

- Keys to equipment/equipment storage and vehicles should be closely monitored and controlled.
- Desk and hand calculators, audio visual equipment, and tools **should** be locked up or stored out of sight when not in use.
- Report any missing equipment immediately to the Park Police.

Employee Property

- Vehicles should be locked and keys removed at all times.
- Items of value should be locked in trunk or glove compartment of personal vehicles.
- When carrying items of value keep them from clear view of others. Purses and other valuables should be kept in locked desk drawers.
- Personal items should not be left unattended.

Personnel

- Always park vehicles in an open or lighted area.
- Non-employees should not be allowed in storage or office areas unless escorted by a Commission employee.
- Personnel not recognized in a work area should be politely asked to identify themselves.
- Remember details about suspicious persons.
- When working after normal work hours, travel to and from transportation in groups of two or more when possible.

Further guidance may be attained from the Risk Management and Safety Office and/or the Park Police.

SECTION 3.01 Workers' Compensation Reporting

The Commission's Workers' Compensation program is administered by the Risk Management and Safety Office. The agency participates in the Montgomery County Self-Insurance Program. As part of the Self-Insurance program, all claims are handled through a third party claims administrator (TPA). The TPA administers the program in accordance with Maryland Workers' Compensation Law.

PURPOSE

The purpose of this directive is to provide supervisors and their respective employees the necessary guidance on the proper reporting of workers' compensation claims; to ensure claims are handled properly; and the employee receives medical attention. This directive also provides some general direction on return to work and disability leave as it pertains to workers' compensation claims.

APPLICABILITY

This directive is applicable when a Commission employee sustains a work related injury or illness.

PROCEDURES

Reporting a Claim

In the event that an employee sustains an on the job injury or illness, the following directives should be followed, when applicable, in order to provide care to the injured and obtain the necessary information and documentation for the proper handling of a workers' compensation claim:

- The employee's supervisor must file a First Report of Injury immediately and no later than within 24 hours of learning of an injury/incident. To do this, simply call the toll free claim reporting number, **1-888-606-2562**. **The insured employee should not call in his/her injury.**
- Prior to submitting the claim, the supervisor should review the Workers' Compensation Reporting Guide (First Report of Injury) to assure that all of the necessary information is known and available.
- The toll free number to report claims is available 24 hours a day, 7 days a week. Please identify that you are calling from the Maryland-National Capital Park and Planning Commission.
- While reporting a claim, the supervisor will need to know the address, phone number, and fax number of the employee's work location. **Reminder:** the work location/division is where the employee is assigned, not where the employee is injured.
- When asked for the employee's job title, the supervisor will need to give two answers. Please state whether the employee is career, contract

(seasonal/intermittent, term, temporary), union, or Park Police Candidate. Secondly, give the employee's actual job title. Volunteers should be reported as volunteers.

- One to two days after the First Report of Injury is phoned in, the supervisor will be sent a completed First Report of Injury. This form should be checked for accuracy, including the date and time the claim was reported. This form is not considered a medical form.
- Should a discrepancy exist on the First Report of Injury, the supervisor should immediately contact the claim reporting service, **1-888-606-2562** and inform them of the corrections that need to be made. Once completing the above procedures, there will not be a need to fill out any additional paperwork, such as the First Report of Injury.

MEDICAL TREATMENT

- The employee or volunteer should get immediate medical treatment for any emergency situation.
- Under the Maryland Workers' Compensation Act, the injured may seek treatment from any medical provider of their choice. However, the supervisor may suggest a provider from the TPA's preferred providers network of preferred providers or refer the injured to the Commission's Occupational Healthcare provider.
- To find a preferred provider, the supervisor may contact one of the designated Health and Benefits Coordinators or the Risk Management and Safety Office for assistance.
- The benefits to using a preferred provider include: (1) a broader network of locations, (2) reduced out of pocket reimbursement and faster reimbursement, and (3) greater access to network specialists.
- A prescription plan is available for all employees with work related injuries/illnesses. The benefit of the prescription plan is that the employee has no out-of-pocket expense. For further information call the Health and Benefits Office.

DETERMINATION OF COMPENSABLE WORK RELATED INJURIES/ILLNESSES

- When an employee's work-related injury/illness is severe enough to prevent immediate return to work under the standards of the Workers' Compensation Act, the employee is considered "temporarily and totally disabled."
- If an injury is considered compensable, the TPA provides reimbursement for wages at 66 2/3% of the employee's salary. While on Temporary Total Disability, the TPA follows benefit schedules issued by Maryland State Law.
- For Merit System employees, these state mandated benefits may be coordinated with disability leave benefits that are Commission paid.

➤ **CONTRACT EMPLOYEES**

For missed work, contract employees (Seasonal/Intermittent) receive 66 2/3% wage reimbursement checks directly from the TPA.

➤ **MERIT SYSTEM EMPLOYEES**

- Merit System employees may be eligible for lost wage reimbursement through M-NCPPC issued disability leave. This disability leave is paid at 100% of the employee's salary. When an employee receives disability leave, it is in lieu of the standard temporary total disability 66 2/3% wage benefit issued through the TPA. The amount of disability leave for which an employee is eligible is governed by applicable Merit System Rules and Regulations or the relevant Collective Bargaining Agreement.
- Disability leave is recorded on an employee's time card by his/her supervisor once an injury is determined to be compensable by the TPA. In certain circumstances and as provided by Collective Bargaining Agreement provisions, a supervisor may be permitted to immediately place an employee on disability leave prior to a formal determination of compensability.
- When an employee has exhausted the maximum length of M-NCPPC issued disability leave, wages are reimbursed at 66 2/3% directly from the TPA.

➤ **VOLUNTEERS**

Volunteers are not eligible for lost time reimbursement or any form of monetary disability leave. When volunteers are injured while performing Commission duties they are covered only for medical expenses up to \$10,000 per individual, per accident for amounts that are not covered by other insurance.

➤ **RETURN-TO-WORK**

Supervisors and the Department of Human Resources and Management will work actively with the TPAI to return employees to light or full duty assignments or the Commission will find light duty positions when a disability is estimated to last 6 months or less. In some cases, permanent reasonable accommodations may also be appropriate. Return-to-work is coordinated through the Health and Benefits Office. Return-to-duty exams are also scheduled through the Health and Benefits Office.

If the injured employee is incapacitated and cannot perform the regular and essential duties of his or her position, efforts will be made to assign the employee an alternative job, or modified duties for the period of recuperation.

Appendix A – Reporting Guide Workers' Compensation

CSR Name: _____

Report #- _____

Today's Date _____

Reporting Guide Workers Compensation

Company Information

Company Name: _____

Company Address: _____ City _____ Stat _____ Zip _____

Company Phone Number: () Company Fax Number: ()

Caller's Name: First: _____ Last _____

Caller's Title: _____ Phone: ()

Physical Address Where Employee Works: _____

Name of Facility: _____

Address: _____ City _____ State _____ Zip _____

Employee Information

Employee's Name: First _____ Middle _____ Last _____

Address: City _____ State _____ Zip _____

ID#: _____ SS#: _____

Phone # ()

DOB: _____ Sex: _____

Marital Status: _____ Dependents: _____

Department: _____ Date of Hire: _____

State of Hire: _____ Job Title: _____

Wage Rate: _____ Hours/per Day: _____ Days Per Week: _____

Paid in Full for Date of Injury? _____ Did Salary Continue? _____

Filing Information

Address Where Injury Occurred: _____ City _____ State _____

Filing State: _____ Employer's Premises: Yes No Long Shore Report: Yes No

Employee Lost One or More Days of Work: _____ Injury Date: _____ Time of Injury: _____

Time Work Began on Day of Injury: _____ If Lost Time, Last Day Worked: _____ Date Returned to Work: _____

Date Employer was Notified: _____ Name of Person Notified: _____

Fatality: _____ Date: _____

Safeguards or Safety Equipment Provided: _____ Was Employee Using Them? _____

Type of Injury: _____ Body Part: _____

What was Employee Doing at the Time of Injury? _____

What Happened? _____

Witness

Witness Name: _____ Phone () _____

Witness Name: _____ Phone () _____

Medical Actions Taken

Employee Taken to Clinic/Hospital Name: _____

Address: _____ City _____ State _____ Zip _____

Phone: () _____

Physician's Name: _____

Type of Treatment: ER First Aid Hospital In-house None Unknown Outpatient

Any Reason to Believe This Was Not Work Related? Yes No Unknown

Explain, if yes: _____

SECTION 3.02

Reporting of Non-Employee Injuries

It is important that all incidents involving personal injury to the general public be reported to the Risk Management and Safety Office. Prompt reporting will greatly aid in the investigation of the accident and reduce or minimize the potential for further injury and damages.

Purpose:

The purpose of this Directive is to inform all Commission employees about reporting mishaps that occur during Commission operations, which involve the general public. Prompt reporting does several things:

- Provides the information to our third party claims administrator, who is responsible for accepting, adjusting or denying the claim.
- Makes follow-up investigations easier since conditions may change over time.
- Provides the injured person the proper continuing care and benefits to which they may be entitled.
- Reduces the potential for a lawsuit or formal claim being filed. The longer it takes to process and investigate a claim, the more irate the citizen becomes, which increases the likelihood of a lawsuit.

Applicability:

The following Directive applies to general liability and personal injury where the general public is involved.

Procedures:

In the event of injury to the general public, the following Directives should be followed when applicable in order to provide care to the injured and obtain the necessary information and documentation for the proper handling of claims.

- Seek appropriate medical attention first.
- An immediate call for assistance should go to the Park Police in your County, except for minor injuries to patrons. However, if you feel that the circumstances require the emergency care and investigative skill of the Park Police, by all means call them.
- Supervisors shall obtain pertinent information, such as; names, addresses, phone numbers when in the field.
- Complete the information required on the "Personal Injury Report Form".
- Seek out witnesses and obtain the same pertinent information.
- If the individual refuses treatment, attempt to get them to sign the form.
- Give a brief narrative describing the alleged incident, without admitting liability (the narrative should contain the what, when, where and how).
- The Supervisor must enter their name, title and date in the appropriate box.
- Send the original copy of the report to the Risk Management and Safety Office **immediately**.
- If the injury appears to be serious, follow-up with a phone call later to find out how the injured party is doing.
- Show concern but **DO NOT** admit liability or offer to pay any bills.

- If the party is irate, starts talking about the Commission paying bills or they are obtaining the services of an attorney, be polite, and have them contact the Risk Management/Safety Office.
- After hanging up with the injured party, **immediately notify the Risk Management and Safety Office at, (301) 454 (6)-1693 or (301) 454 (6)-1692.**

The supervisor must complete the appropriate form for personal injury involving the general public. A copy of this report is included in this section. You may also obtain a copy of this form via the intranet or by contacting the Risk Management and Safety Office.

Caution: Employees involved in an accident and in the administrative processing of accident reports or claims must not admit or discuss liability with the other parties or claimants, since such information may be used in a prejudicial way against the Commission. It is beyond the scope of an employee's authority to admit liability or accept responsibility for an accident or incident.

Should you have questions on the above Directives involving personal injury to the general public, please contact the Risk Management and Safety Office for further guidance or clarification.

Appendices:

- Appendix A – Personal Injury Report Form
- Appendix B – Personal Injury Report Form (Ice Rink)
- Appendix C – Personal Injury Report Form (Pool)

Date Received _____
 Date Reviewed _____

Personal Injury Report Form (Ice Rink)

Location Code _____
 (Risk Management Use Only)

To be used for reporting injuries to patrons or others not employed by the Commission

Date of Accident _____ Time of Accident _____ AM PM Ice Rink Location _____

INJURED PERSON INFORMATION
 Name: _____ Age: _____ Phone: _____
 Street: _____ Apt: _____
 City: _____ State: _____ Zip: _____
 Parent/Guardian (If under 18): _____

NATURE AND EXTENT OF INJURY: (Check body part injured)

·Face	·Ear (<i>hearing</i>)	·Eye	·Nose	·Mouth	·Scalp	·Skull
·Neck	·Arm (<i>above wrist</i>)	·Wrist	·Hand	·Fingers	·Abdomen	·Back
·Chest	·Shoulder	·Trunk (other)	·Genitals	·Hip		
·Ankle	·Legs (<i>above ankle</i>)	·Foot	·Toes	·Other _____		

Treatment Provided: _____ Treatment Refused _____

TYPE OF INJURY:

·Strike	·Strain	·Collision	·Caught in or between	·Fall/slip/trip
·Cut, puncture or scrape	·Animal bite	·Insect sting	·Foreign body in eye	·Burn (<i>heat or cold</i>)
·Heart attack	·Stoke	·Heat stroke/Heat exhaustion		

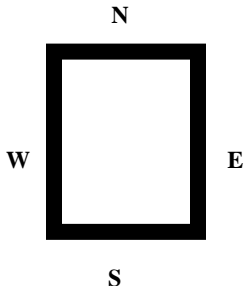
·Other (please describe) _____

Cause of Injury: (brief statement)

MANAGER/SUPERVISOR INCIDENT DESCRIPTION (include where accident occurred) attach additional sheets if necessary

Transported by: ·Ambulance ·Relative ·Self ·Other _____

WITNESS
 Name: _____ Phone: _____
Address: _____



Ice Rink
 Location of accident (use map) _____
 Skate Used: _____
 Rental (#) _____ Own (type) _____
Number of Guards _____
Condition of Ice:
 ·Excellent ·Good
 ·Fair ·Other

Manager on duty: _____
Report by: _____
 Title: _____
 Report date: _____

 Facility Manager's Signature date

Send copy to Risk Management and Safety Office Fax (301) 454-1714

Date Received _____
 Date Reviewed _____

Personal Injury Report Form (Pool)

Location Code _____
 (Risk Management Use Only)

To be used for reporting injuries to patrons or others not employed by the Commission

Date of Accident _____ Time of Accident _____ AM PM Pool/Splash Park/
 Location _____

INJURED PERSON INFORMATION
 Name: _____ Age: _____ Phone: _____
 Street: _____ Apt: _____
 City: _____ State: _____ Zip: _____
 Parent/Guardian (If under 18): _____

NATURE AND EXTENT OF INJURY: (Check body part injured)
 ·Face ·Ear (*hearing*) ·Eye ·Nose ·Mouth ·Scalp ·Skull
 ·Neck ·Arm (*above wrist*) ·Wrist ·Hand ·Fingers ·Abdomen ·Back
 ·Chest ·Shoulder ·Trunk (*other*) ·Genitals ·Hip
 ·Ankle ·Legs (*above ankle*) ·Foot ·Toes ·Other _____
 Treatment Provided: _____ ·Treatment Refused

TYPE OF INJURY:
 ·Strike ·Strain ·Collision ·Caught in or between ·Fall/slip/trip
 ·Cut, puncture or scrape ·Animal bite ·Insect sting ·Foreign body in eye ·Burn (*heat or cold*)
 ·Heart attack ·Stroke ·Heat stroke/Heat exhaustion
 ·Other (please describe) _____

CAUSE OF INJURY: (brief statement)

MANAGER/SUPERVISOR INCIDENT DESCRIPTION (include where accident occurred) attach additional sheets if necessary
 Transported by: ·Ambulance ·Relative ·Self ·Other _____

WITNESS
 Name: _____ Phone: _____
Address: _____

Please
attach
map of
pool.

Swimming Pool
 Location of accident (use map) _____
 Attendance (#) _____
 Number of Guards _____
 Location of Guards _____
 Condition of Water/Deck:
 ·Excellent ·Good
 ·Fair ·Other

Manager on duty: _____
Report by: _____
 Title: _____
 Report date: _____

 Facility Manager's Signature date

Send copy to Risk Management and Safety Office Fax (301) 454-1714

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M-NCPPC VEHICLE USE PROGRAM

AUTHORITY This Administrative Practice was revised by the Commission on April 18, 2012. This Practice was updated for minor clarifications by the Executive Director on June 20, 2018 as described in the Purpose/Background section.



Patricia Barney, Executive Director

RESCISSION This M-NCPPC Administrative Practice, as initially amended on April 18, 2012, consolidated and replaced the following policies: Administrative Practice 6-11, "Bi-County Staff Vehicles Policies and Procedures," Administrative Practice 6-12, "Maintenance of Commission-Owned Passenger Vehicles, Administrative Practice 3-50, "Reporting Vehicle Accidents," and M-NCPPC Notice 94-05, "Guidelines for Driving Commission Vehicles." Viable portions of these policies have been incorporated into this Practice.

REFERENCES

- Internal Revenue Service Publication 15-B, Employment Tax Guide to Fringe Benefits.
- Merit System Rules and Regulations, Section 661, Assignment of a Commission Vehicle.
- Administrative Practice 2-22, Prohibitions on Smoking, Use of Tobacco Products and Electronic Cigarettes on M-NCPPC Property and in M-NCPPC Vehicles.
- M-NCPPC Administrative Practice 2-26, Controlled Substance and Alcohol-Free Workplace.
- M-NCPPC Administrative Practice 3-10, Authorized Business Expenses (Travel, Lodging, Meals, Events, Meetings/Conferences Etc.).
- M-NCPPC Administrative Procedure 04-04, Risk Management and Safety Manual.
- M-NCPPC Notice 11-06, "Expense Reimbursement for Use of Inter-County Connector."
- M-NCPPC Notice 10-01, "Use of Handheld Devices While Operating a Motor Vehicle."
- M-NCPPC Driving Requirements and Record Release Authorization Form.

APPLICATION This Practice applies to all drivers of Commission vehicles. Employees who hold a Commercial Driver's License (CDL) must comply with all additional federal and state mandates, including but not limited to, requirements as issued by the Federal and Maryland Departments of Transportation and the Federal Highway Administration). Represented employees should refer to their respective collective bargaining agreements for any additional or specific provisions on vehicle use.

PURPOSE AND BACKGROUND This Practice sets forth the general requirements and criteria for use of M-NCPPC vehicles. The Practice, as originally adopted, has been revised to incorporate the following actions/decisions:

- January 8, 1986: Commission approved payroll deduction as a method of collecting commuting fees; designed an approval process for assigning 24-hour vehicles;

- approved a commuting fee structure; explained tax liability for use of vehicles; and amended the process for keeping logs of usage.
- May 12, 1987: Commission approved 24-hour vehicle assignments for command officers of the Park Police.
- April 18, 2012: Policy amended to:
 - Consolidate and update stand-alone policies relating to vehicle use.
 - Clarify and strengthen standards for authorization of vehicle assignments, driver eligibility, and driving requirements.
 - Update provisions for vehicle identification, recordkeeping, and general operation of agency vehicles.
 - Clarify tax liability for use of vehicles.
- October 3, 2017: Policy reviewed and updated to add a reference to the Risk Management and Safety Manual.
- June 20, 2018: Minor updates were made to update cross-references and correct the definition of “highly compensated employee/position” pursuant to the 2018 IRS Employer’s Tax Guide to Fringe Benefits.

DEFINITIONS

Appointed Officers: This term refers collectively to the following positions: Executive Director, General Counsel, and Secretary-Treasurer.

Authorized Driver: Operators of M-NCPPC Vehicles who have met the agency’s driver eligibility criteria and driving requirements.

Commission: The governing body of the Maryland-National Capital Park and Planning Commission (“M-NCPPC” or agency), which is comprised of the five members from each of the agency’s two Planning Boards, for Montgomery County and Prince George’s County.

Highly Compensated Employee/Position: Consistent with the Internal Revenue Service definition, these individuals have a salary that meets the Internal Revenue Service Publication 15B, Employer’s Tax Guide to Fringe Benefits standards for highly compensated employees. As of 2018, these employees earn more than \$120,000.

De minimis Use: Non-business errands between the place of business and home.

Fleet Manager: Person responsible for providing oversight, planning, ordering, and maintenance of the motor fleet.

The Maryland-National Capital Park and Planning Commission (M-NCPPC): For purposes of this Practice, “M-NCPPC” or “agency” shall be used to reference the entity acting in its organizational capacity.

Risk Management and Safety Office: Office responsible for administration of the agency’s driver safety program including training and driver license monitoring.

Vehicle: Any M-NCPPC passenger car, van, truck, heavy equipment or other type of motorized vehicle requiring a driver’s license to operate under Maryland law.

Vehicle Administrator: The departmental representative responsible for verifying authorized drivers, maintaining vehicle use logs, and maintaining documentation of vehicle assignments.

POLICY

The M-NCPPC's vehicle use program has been established to assist with carrying out official business of the agency. The availability and/or use of agency vehicles is not an entitlement and shall be determined on the basis of work program needs, assigned job duties, funding, and requirements outlined in this Practice.

Only drivers authorized by the M-NCPPC may operate agency vehicles. Individuals must meet the requirements outlined in Section III, Driver Eligibility and Driving Requirements for Use of M-NCPPC Vehicles, prior to operation of vehicles. All drivers also must comply with the laws of the jurisdiction in which the vehicle is being driven and take steps to ensure that vehicle operation shows concern for public accountability and safety.

With respect to M-NCPPC vehicle use the agency shall:

- Review driving records to promote safe operation of vehicles.
- Permit, modify, or revoke the assignment or use of any vehicle as required.
- Reserve the right to retrieve vehicles from any location, including a residence.
- Reserve the right to re-allocate vehicles from the agency's fleet.
- Ensure compliance with tax regulations on the treatment of vehicle use.

Specific requirements for the Vehicle Use Program are outlined by relevant subsection. General oversight of the program is outlined in the Section titled Responsibilities.

This Practice outlines policy on the following areas:

- I. Value and Taxability of M-NCPPC Vehicle Use, Stipends, and Reimbursement of Authorized Travel Expenses
- II. M-NCPPC Vehicle Use Categories and Authorization
- III. Driver Eligibility and Driving Requirements for Use of M-NCPPC Vehicles
- IV. General Requirements for Vehicle Identification, Operation, Maintenance and Security of M-NCPPC Vehicles
- V. Responsibilities

I. Value and Taxability of M-NCPPC Vehicle Use, Stipends, and Reimbursement of Authorized Travel Expenses

A. Value and Taxability of M-NCPPC Vehicle Use

M-NCPPC vehicle use is generally limited to official business. This use is not considered by the Internal Revenue Service as a taxable fringe benefit. Personal use of M-NCPPC vehicles is generally prohibited. In limited circumstances specified in this Practice, the M-NCPPC may assign a take home vehicle to an employee, authorizing commuting (between the workplace and home) and de minimis personal use of a vehicle. Such non-business use is generally subject to treatment as a taxable fringe benefit, although some exceptions exist under the Internal Revenue Service regulations for specific classes of employees and assigned duties.

Pursuant to Internal Revenue Service regulations, in some cases it may be appropriate for the M-NCPPC to require employees to reimburse the agency for non-business use in lieu of reporting the use as taxable income. This determination is made by the M-NCPPC.

The application of tax treatment is described in this Practice under each category of M-NCPPC vehicle use (See Section II, M-NCPPC Vehicle Use Categories and Authorization). The Secretary-Treasurer is responsible for providing guidance on the application of tax regulations and valuation of M-NCPPC vehicle use, and recommendations for stipends. If a conflict exists between the Internal Revenue Service regulations and this Practice, the Internal Revenue Service regulations shall prevail.

B. Stipends for Regular Business Use of Personal Vehicles

The M-NCPPC may grant a monthly stipend in lieu of assigning a take home vehicle. The purpose of the stipend is to offset the cost of regular business use of an individual's personal vehicle.

1. The M-NCPPC may consider at its own discretion, stipends for the following positions:
 - a) Planning Board Chairs, Appointed Officers (Executive Director, Secretary-Treasurer, and General Counsel), Department Heads and Deputy Department Heads.
 - b) Any other highly compensated position as defined in this Practice and deemed appropriate by the respective Planning Board Chair(s).
2. Stipends for all positions (other than the Planning Board Chairs): Stipends must be authorized by the respective Planning Board Chair(s) following consultation with the Secretary-Treasurer:
 - a) Stipends for Individuals in Operating Departments: shall be authorized in writing by the respective Planning Board Chair.
 - b) Stipends for Individuals in Bi-County, Central Administrative Services Departments/Operations: shall be authorized in writing by both Planning Board Chairs.

The stipend for a Planning Board Chair shall be authorized in writing by the Executive Committee following consultation with the Secretary-Treasurer.

3. Stipends are treated as taxable income to the employee. The Secretary-Treasurer shall advise the Planning Board Chairs on the application of any Internal Revenue Service regulations for taxable income, appropriate application of a stipend, and recommended stipend amount. Employees should consult their own tax consultant for necessary documentation of business use as it relates to filing of taxes.

C. Reimbursement of Authorized Travel Expenses (Fueling, Mileage, Tolls, and Parking)

Whenever practical, M-NCPPC vehicles should be used for local travel to business meetings and other authorized M-NCPPC events. Limited use of a personal vehicle may be authorized when used for official M-NPPC business.

1. Fueling of an M-NCPPC Vehicle
 - a) M-NCPPC vehicles should be fueled at agency fueling sites designated by the department's Fleet Manager (see also Section IV, General Requirements for Vehicle Identification, Operation, Maintenance and Security of M-NPPC Vehicles).
 - b) Use of retail or commercial fueling sites shall be kept to a minimum. In the event that retail or commercial sites are used, individuals should purchase only an amount sufficient to conveniently reach an agency fueling center. Receipts must be maintained for reimbursement of fueling charges. Mileage of vehicle at time of fueling must be noted on receipt along with reason for using commercial site.
2. Mileage Reimbursement for Business Use of Personal Vehicles

Mileage reimbursement may be authorized for personal vehicles when they are used to carry out official M-NCPPC duties. Pursuant to Administrative Practice 3-10, approval must be obtained by the employee's Department Head.

Department Heads, General Counsel, Executive Director, and Planning Board members shall submit requests for reimbursement to the Secretary-Treasurer for review and authorization. Mileage reimbursement requests from the Secretary-Treasurer shall be submitted to the Executive Director for review and authorization.

- a) Approval of mileage reimbursement shall consider whether travel is necessary to the employee's official duties, whether M-NCPPC vehicles were readily available and convenient, and whether funding is available for the reimbursement.
- b) The mileage reimbursement rate is established by the Executive Director and based on the reimbursement standards established by the IRS. The established reimbursement rate is

announced through an M-NCPPC Notice. Business use must be tracked by date, actual mileage, and reason for travel, and location of travel (see also, Practice 3-10, "Expense Reimbursement for Travel, Meetings, and Conferences").

3. Incidental Travel Expenses

Expenses such as parking fees, tolls, or other incidental travel charges are eligible for reimbursement when they are incurred for official M-NCPPC business and approved by the Department Head or his/her designee. These charges shall be handled in accordance with Practice 3-10, Expense Reimbursement for Travel Meetings and Conferences.

II. M-NCPPC Vehicle Use Categories and Authorization

M-NCPPC vehicles may be designated for the following uses:

- Pool vehicles that are shared by employees
- Onsite vehicles specifically assigned to an individual
- Take home vehicles on either an:
 - Ongoing basis; or
 - Occasional overnight/temporary basis
- Vanpools

A. Pool Vehicles

These vehicles are part of a fleet assigned to a department or operation for the purposes of shared use by authorized drivers.

1. Intended Use: Pool vehicles are intended for short-term, M-NCPPC business during normal work hours such as traveling to meetings, conferences, and other agency approved programs. Pool vehicles are not intended for overnight use, commuting to and from work, or other non-business travel. Incidental use for meal breaks is permitted only when the activity occurs during the workday and such meals are en route to carrying out official M-NCPPC duties. Pool vehicles must be returned to the designated worksite at the end of the authorized use.

Vehicles in the pool fleet may be reallocated for use under II (C) 2, Occasional Overnight/Temporary Take Home Vehicle. However, the use must meet the vehicle authorization and assignment criteria outlined in that section. At the end of its use, the vehicle shall be returned to the pool vehicle fleet.

2. Authorization of Pool Vehicles: The availability of pool vehicles shall be authorized by the respective Department Head or his/her designee.
3. Use Criteria: Pool vehicles may be operated by individuals who are identified in, and meet the requirements of Section III, Driver Eligibility and Driving Requirements for Use of M-NCPPC Vehicles. The Vehicle Administrator shall confirm that eligibility and driving requirements have been met.
4. Tax Treatment: Pool vehicles are restricted to business use only. Consistent with the Internal Revenue Service regulations, the business use of a vehicle is not considered a fringe benefit for purposes of taxable income to the employee.
5. Tracking and Reporting of Use:
- a) The Vehicle Administrator shall maintain a listing of employees who meet driver eligibility and driving requirements outlined in Section III. The Risk Management and Safety Office shall verify which individuals have met requirements for driving records and driver safety training.
 - b) Vehicle mileage logs must be maintained to track use of pool vehicles. Completed logs must be maintained by the Vehicle Administrator for three (3) years.

B. Onsite Assigned Vehicles

These vehicles are designated for use by a specific employee to carry out official duties of a position or operation. These vehicles are not part of the pool vehicle fleet, but do remain on agency property during non-working hours.

1. Intended Use: These vehicles may be used to attend to M-NCPPC duties such as meetings, conferences, inspections, emergency work, and other agency approved programs. The vehicle must be returned to the designated driver's primary work location when not in use.

Personal use, including commuting to and from the individual's residence, is prohibited. Incidental use for meal breaks is permitted only when the use occurs during the workday and such meals are en route to carrying out official M-NCPPC duties.

2. Authorization of Onsite Vehicle Assignments: Onsite assignments shall be recommended by the Department Head and approved in writing by the respective Planning Board Chair. Approval authority shall not be delegated below the level of the Planning Board Chair. A Planning Board member serving in a formal acting capacity as the Chair may carry out the duties for authorization of assignments.
 - a) Operating Departments: Onsite vehicle assignments shall be authorized in writing by the respective Planning Board Chair.
 - b) Bi-County, Central Administrative Services Departments/Operations: Assignments must be authorized in writing by both Planning Board Chairs.

All ongoing assignments shall be reauthorized annually in writing by the respective Chair(s), or when any significant modifications occur such as replacement of a vehicle.

3. Vehicle Assignment Criteria:

The assignment of an onsite vehicle may be authorized when all of the following criteria (a-c) are met:

- a) The availability or type of pool vehicle is too limited to effectively carry out duties;
 - b) A designated vehicle is necessary to maintain the efficiency of the services being performed;
 - c) The employee's duties meet one or both of the following criteria:
 - Duties and responsibilities require regular use of a vehicle to attend meetings, inspections, audits, and other services which must be performed away from the assigned worksite and the expected business mileage is at least 5,000 miles annually; and/or
 - Duties require the use of vehicles with specialized equipment, tools, or other records/material to perform assigned job functions.
4. Tax Treatment: The use of an assigned onsite vehicle is restricted to business travel and incidental meal breaks as defined in the section titled, Intended Use. Therefore, use is not considered a fringe benefit for purposes of taxable income to the employee.
 5. Tracking and Reporting of Vehicle Assignments/Use:
 - a) The Department Head shall ensure that a current listing of all authorized assignments is maintained. This listing shall be reported to the Secretary-Treasurer on a semi-annual basis and shared with the Fleet Manager.
 - b) Vehicle logs must be maintained in all vehicles to track use. Completed logs must be maintained by the Vehicle Administrator for three (3) years.

C. Take Home Vehicles

In limited circumstances a 24-hour vehicle may be authorized to allow the designated driver to carry out official M-NCPPC duties. Take home vehicles are reserved for positions that have significant after-hours and multiple site duties that do not make it practical to use a shared vehicle or one that must be returned

at the end of each work day. Take home vehicles may be assigned on an ongoing or temporary basis subject to the criteria outlined in this section.

Commuting to and from work and incidental “de minimis” use of a take home vehicle is permitted when it does not adversely affect the vehicle or the public perception of the agency. De minimis use (e.g., meal breaks while en route to/from official business or incidental errands between an employee’s place of business and residence) is permitted only on days during which official duties are being carried out. De minimis use should not involve significant extra driving while en route to business activities.

The Internal Revenue Service considers the use of take home vehicles a taxable fringe benefit to the employee and establishes regulations for determining the amount of the taxable fringe benefit. Under these regulations, the taxable fringe benefit is generally calculated on the basis of the Fair Market Value (FMV) of the vehicle’s personal use along with other applicable costs (e.g., fuel). Some qualified vehicle uses may be exempt from tax reporting. The Secretary-Treasurer shall:

- Review all take home assignments to determine whether the vehicle use is considered a taxable fringe benefit;
- Determine the appropriate valuation method, which may include but is not limited to, the Lease Value and Commuting rules as described below. Implemented methods are subject to Internal Revenue Service regulations currently in force;
- Calculate the amount of the taxable fringe benefit for each vehicle; and
- Communicate specific tax withholding requirements, record-keeping responsibilities, and applicable restrictions to ensure compliance with current Internal Revenue Service regulations.

Lease Value Rule: Under this rule, the FMV for the use of the vehicle is determined on the basis of Internal Revenue Service tax regulations for the cost of leasing the vehicle. The Internal Revenue Service permits either a full or a pro-rated value to be reported. A pro-rated Lease Value may be used to report taxable income for the amount attributed to the non-business use of the vehicle. The M-NCPPC will use a pro-rated Lease Value only when the driver has maintained and submitted, in a timely manner, a mileage log that distinguishes between business and non-business mileage. A driver’s failure to submit completed mileage logs in a timely manner will result in the reporting of taxable income on the basis of the full annual Lease Value of the vehicle along with any other costs as required.

This Lease Value Rule shall be used to calculate the FMV of any take home vehicles that may be assigned to the following positions:

- Planning Board Chairs, Appointed Officers, Department Heads, and Deputy Department Heads;
- Highly Compensated Employees as defined by the Internal Revenue Service (see “Definitions” Section).

Commuting Rule: Under this Rule, the taxable fringe benefit of a take home vehicle is determined by multiplying each one-way commute to and from home by \$1.50. The application of this Rule is subject to current Internal Revenue Service regulations. To be considered for this Rule, all of the following requirements must be met along with any applicable tax regulations:

- The Commuting Rule cannot be applied to any position identified for application of the Lease Value Rule (above).
- The Rule cannot be applied when the vehicle is being provided as a compensation benefit.
- The driver must maintain a daily mileage log documenting each one way commute to and from home.
- The Rule can be considered for short or long-term take home assignments as long as the vehicle is required for the performance of the duties.
- The employee must be required by the M-NCPPC to commute daily in the agency vehicle for business. If the employee uses his/her personal vehicle to commute to work more than occasionally, then the Commuting Rule cannot be used and the Lease Value Rule shall be applied to

the use of the agency vehicle. Acceptable use of a personal car shall be determined by the Secretary-Treasurer to ensure compliance with tax regulations.

1. Ongoing Take Home Assignments

- a) Intended Use: These assignments involve a continuing need for a take home vehicle, and go beyond the parameters for occasional overnight/temporary use as described in C (2).

Ongoing Take Home assignments are generally limited to the following positions: Planning Board Chairs, Appointed Officers, Department Heads and Deputy Department Heads. Other positions can be considered only if they meet the criteria outlined in section (b), Vehicle Assignment Criteria.

When not being used to carry out official M-NCPPC duties, the vehicle may be parked at the driver's residence or other location authorized by M-NCPPC. However, take home vehicles must be returned to the designated worksite when an employee is either absent from duty or away from the workplace for more than ten (10) consecutive workdays.

Authorization of Ongoing Take Home Assignments: All ongoing take home assignments must be authorized in writing by the respective Planning Board Chair. Take Home Vehicle assignments for a Planning Board Chair shall be approved in writing by the Executive Committee.

Department Heads shall ensure that all assignments recommended for review by the Planning Board Chair(s) meet the Vehicle Assignment Criteria outlined in section (b) before recommendations are forwarded.

Approval authority shall not be delegated below the level of the Planning Board Chair. A Planning Board member serving in a formal acting capacity as the Chair may carry out the duties for authorization of assignments.

- Operating Departments: Take home assignments shall be authorized in writing by the respective Planning Board Chair.
- Bi-County, Central Administrative Services Departments/Operations: Assignments must be authorized in writing by both Planning Board Chairs.

Ongoing assignments for employees must be reviewed by Department Heads at least semi-annually to ensure continued need. Assignments lasting more than a year shall be reauthorized annually in writing by the respective Planning Board Chair(s) and the review of such assignments shall be coordinated with the Secretary-Treasurer's year end Reporting of Authorized Vehicle Assignments.

Significant modifications in authorized assignments (such as frequency of use, location at which the vehicle will be maintained, and/or replacement of a vehicle) must be submitted to the respective Planning Board Chair(s) for reauthorization.

In lieu of assigning an ongoing take home vehicle, the M-NCPPC may grant a stipend to cover business travel (see also, Section I, Value and Taxability of M-NCPPC Vehicle Use, Stipends, and Reimbursement of Authorized Travel Expenses).

- b) Vehicle Assignment Criteria: Other than those holding positions listed in 1(a) Intended Use, all individuals must meet the requirements outlined in items 1) and 2) below.

1) Position Duties

These vehicle assignments may be approved when one or more of the following criteria are met:

- Employee's supervisory duties require visits to multiple worksites/facilities and frequent after-hours meetings at least 18 days per calendar month. Visits may be to other M-NCPPC sites or non-M-NCPPC locations such as communities or organizations with whom the agency does business; and county/state/federal government offices;
- Employee is regularly responsible for responding to emergencies and other after-hours calls and is scheduled to be on call for at least 18 days per calendar month; and/or
- Employee is assigned to duties that require the ongoing, non-seasonal use of either a specialized vehicle or the use of a dedicated vehicle that must store specialized equipment, tools or records. These vehicles must be available to attend to regular and after-hours business needs of the agency.

2) Efficiency/Mileage Standard

In addition to meeting the position duties outlined above, assignments must meet a minimum annual mileage standard which requires that M-NCPPC vehicle assignments have a projected use of at least 5,000 business miles per year. This requirement may be waived only in writing by the respective Planning Board Chair(s).

c) Tax/Reimbursement Treatment: In accordance with the provisions outlined in Section II C., Take Home Vehicles, the Secretary-Treasurer shall review each vehicle assignment to determine the appropriate taxable fringe benefit.

d) Tracking and Reporting of Vehicle Assignments/Use:

1) The Department Head shall:

- Ensure that a current listing of all authorized assignments is maintained.
- Forward all newly authorized assignments to the Secretary-Treasurer. The Secretary-Treasurer will review the assignment to determine appropriate tax treatment and communicate this information to the driver.
- Conduct, at least semi-annually, a review of all ongoing assignments and provide a report of assignments to the Secretary-Treasurer.

2) Drivers are required to maintain a vehicle mileage log which distinguishes between business and non-business use. Completed mileage logs must be submitted to the Secretary-Treasurer by established dates.

2. Occasional Overnight/Temporary Take Home Assignments

a) Intended Use: These vehicles assignments are intended for temporary, short term critical needs that meet the assignment criteria outlined in Section c., Vehicle Assignment Criteria.

When not being used in the course of agency business, the take home vehicle may be parked at the driver's residence or other location authorized by M-NCPPC. Vehicles will revert to the agency fleet at the conclusion of the approved assignment.

b) Authorization of Occasional Overnight/Temporary Assignments: These assignments must be authorized in writing by the Department Head. The Deputy Department Head may provide written authorization in the absence of the Department Head. The approval authority may not be delegated below this level and the assignment may be authorized only for the period in which duties in Section c. (below) are met.

Vehicle assignments which are expected to exceed ten (10) scheduled workdays in a month must be submitted to respective Planning Board Chair(s) for written authorization as follows:

- Operating Departments: Take home assignments shall be authorized in writing by the respective Planning Board Chair.
 - Bi-County, Central Administrative Services Departments/Operations: Assignments must be authorized in writing by both Planning Board Chairs.
- c) Vehicle Assignment Criteria: Temporary assignments may be considered only when **both** items 1) and 2) below are met:
- 1) Duties involve after-hours work, which makes it impractical to return the vehicle at the end of the day; **and**
 - 2) One or more of the following standards is met:
 - A specialized vehicle is required to respond to snow and other weather-related emergencies;
 - Duties involve temporary on-call or crises-oriented assignments, including rotational assignments;
 - Duties occur seasonally (such as summer or winter programs) and require the individual to carry out, on a daily basis, duties at multiple sites; and/or
 - Other reasons as approved by the respective Planning Board Chair(s).
- d) Tax/Reimbursement Treatment: Some occasional overnight/temporary assignments may be considered a taxable fringe benefit to the employee consistent with the Internal Revenue Service tax regulations. In accordance with the provisions outlined in Section II C., Take Home Vehicles, the Secretary-Treasurer shall review each vehicle assignment to determine the appropriate taxable fringe benefit.
- e) Tracking and Reporting of Vehicle Assignments/Use:
- 1) Department Heads shall ensure that a current listing of all temporary assignments is maintained.
 - Assignments that extend beyond ten (10) workdays per month shall be reported to the Secretary-Treasurer upon authorization by the Planning Board Chair. The Secretary-Treasurer shall review assignments to ensure compliance and reporting with tax regulations.
 - A semi-annual report of all assignments that extend beyond ten (10) workdays per month shall be furnished to the Secretary-Treasurer.
 - 2) Drivers are required to maintain a vehicle mileage log which distinguishes between business and non-business use. Completed mileage logs must be submitted to the Secretary-Treasurer by established dates.

D. Agency Vanpools

1. Intended Use: Vanpools may be implemented by the M-NCPPC to promote resource conservation through shared commuting to and from work. Vanpools are strictly established for commuting purposes and may not be used by participants to conduct non-M-NCPPC business or carry out personal errands. At the conclusion of the commute, the vehicle must be maintained at the authorized site(s) designated by the department operating the vanpool.

Vanpools are implemented on a departmental basis, subject to funding and operational needs. Vanpools are not an entitlement and are provided by the M-NCPPC as long the program is deemed to be in the best interest of the agency. Vanpools may be terminated or modified by M-NCPPC. Vanpool participants must reimburse the agency for costs associated with operation of the vanpool.

2. Authorization of Vanpools: The implementation of vanpools shall be recommended by the Department Head and approved in writing by the respective Planning Board Chair(s) as outlined below. Approval authority shall not be delegated below the level of the Planning Board Chair. A Planning Board member serving in a formal acting capacity as the Chair may carry out the duties for authorization of vanpools.
 - Operating Departments: Vanpools shall be authorized in writing by the respective Planning Board Chair.
 - Bi-County, Central Administrative Services Departments/Operations: Vanpools must be authorized in writing by both Planning Board Chairs.

Departmental recommendations for consideration of vanpools shall include:

- a) Location(s) at which the vanpool is operated and maintained;
- b) Driver assigned to operate vanpool;
- c) Number of employees that will utilize the vanpool; and
- d) Any other information required by the Secretary-Treasurer for purposes of ensuring compliance with Internal Revenue Service regulations and accurate payroll accounting.

Once implementation of the vanpool is authorized, participants must sign an acknowledgement form indicating their understanding of the vanpool's use and authorization of payroll deductions for costs associated with vanpool use. The authorization form shall be developed by the Secretary-Treasurer following input from the General Council.

The vanpool program or any specific vanpool may be rescinded or modified at the discretion of the respective Planning Board Chair(s).

3. Requirements for Vanpool Use: Following authorization for use of vanpools, the Department Head shall ensure that the vanpool meets all of the following requirements:
 - a) The vanpool vehicle meets the passenger and use standards established by the Secretary-Treasurer to ensure compliance with Internal Revenue Service regulations for employer vanpools;
 - b) Vanpool drivers must meet all requirements for authorized drivers as established in this Practice, including any necessary certifications for operating the vehicle; and
 - c) All vanpool participants sign an Agreement acknowledging that:
 - 1) The vanpool is a service provided by the M-NCPPC as long it is deemed in the best interest of the agency. The use of the vanpool may be terminated at any time by the agency with two (2) weeks written notice. The agency may implement immediate termination of any vanpool arrangement due to violations of agency policy or local/state/federal laws.
 - 2) The vanpool is strictly limited to commuting to and from work and may not be used for personal business.
 - 3) Vanpool use must be reimbursed to the M-NCPPC through payroll deduction or other form of payment specified by the Secretary-Treasurer. All participants will each reimburse the agency for any mileage associated with their use.
 - 4) Vanpool riders:
 - Must comply with the designated pick up and drop off locations and times;
 - Are responsible for providing advance notice to their supervisor and the vanpool operator if any commute (to and/or from work) will not be utilized. Notice requirements will be established by the department operating the vanpool;
 - Must wear seatbelts and remain seated at all times;
 - Are responsible for reporting any concerns related to operation of the vanpool, violations of M-NCPPC policy related to vehicle use, and/or noncompliance with driving/traffic laws; and
 - Must provide at least two (2) weeks written notice to the Department Head when terminating their participation.

The Agreement form will be issued by the Secretary-Treasurer to departments operating a vanpool and will include requests for any information needed to ensure proper tracking of payroll deductions.

4. Tax Treatment/Reimbursement: Vanpool participants are required to reimburse the agency for costs associated with the use of the vanpool. The Secretary-Treasurer shall:
- Determine the vanpool mileage reimbursement rate(s).
 - Calculate and communicate to vanpool participants, the appropriate amount of reimbursement.

Reimbursement is made through payroll deduction or other method deemed appropriate by the Secretary-Treasurer. Because employees must reimburse the M-NCPPC for the use of a vanpool, the vanpool use is not reported as a taxable fringe benefit. The Secretary-Treasurer shall establish Administrative Procedures to ensure that all vanpools comply with the Internal Revenue Service exemptions from taxable fringe benefits.

5. Tracking and Reporting of Vanpools:

a) Department Heads shall:

- Ensure that a current listing of vanpools and vanpool participants is maintained at all times.
- Immediately notify the Secretary-Treasurer of any newly authorized vanpools, names/work locations of any new participants, and any changes in participation.
- Provide a semi-annual report which verifies continued participation in the vanpool, location of the vanpool, names of vanpool participants, and any other information requested by the Secretary-Treasurer.
- Notify the Risk Management and Safety Office of any new vanpools to allow driver records and liability issues to be reviewed prior to operation of the vehicle.

- b) Drivers are required to maintain a vehicle mileage log documenting all vehicle use. Logs shall be maintained by the Vehicle Administrator and made available to the Secretary-Treasurer upon request.

III. Driver Eligibility and Driving Requirements for Use of M-NCPPC Vehicles

Department Heads must ensure that employees meet the requirements in this Section prior to operating vehicles.

A. Authorized Drivers

The individuals listed below may be authorized to drive M-NCPPC vehicles provided they comply with other requirements of Section III.

- Merit employees;
- Contract employees as defined by Practice 2-16, Seasonal/Intermittent, Temporary and Term Employment;
- Department Heads;
- Appointed Officers;
- Planning Board members;
- Volunteers registered with the M-NCPPC; or
- Any other individuals specifically authorized in writing by the respective Planning Board Chair(s). For example, individuals from temporary agencies, independent contractors/consultants, public officials, or other individuals are not permitted to operate agency vehicles unless specifically authorized in writing as follows:
 - Vehicles Being Driven in Operating Departments: must be authorized by the respective Planning Board Chair.
 - Vehicles Being Driven in Bi-County, Central Administrative Services Departments/Operations: must be authorized by both Planning Board Chairs.

B. Driving Requirements

Individuals must meet each of the following requirements in order to operate an M-NCPPC vehicle.

1. Maintain a Valid Driver's License and Driving Record Permitting Use of an Agency Vehicle

The M-NCPPC will review an employee's driver's license and driving record prior to the use of any agency vehicle and/or when an employee is being considered for employment, promotion, and/or transfer to a position which requires driving.

- a) Individuals must hold a valid driver's license issued by the jurisdiction in which they reside. Individuals required to operate specialized vehicles also must maintain necessary certifications and/or license endorsements (e.g., Commercial Drivers' Licenses, air brake endorsements, special class licenses, etc.). Licenses must allow the individual to operate a vehicle in the State of Maryland.
- b) Individuals must complete the M-NCPPC Driving Requirements and Record Release Authorization Form prior to operating an agency vehicle. By signing the form, drivers acknowledge that they will:
 - Follow all M-NCPPC policies pertaining to vehicle use;
 - Maintain a valid driver's license at all times in order to operate an M-NCPPC vehicle;
 - Be enrolled in the M-NCPPC Driver's License Monitoring Program;
 - Complete the agency's driver safety training program; and
 - Notify the M-NCPPC of changes to his/her driver's license as outlined in subsection c, Notification of Changes in Driving Record/Citations/Violations.

The M-NCPPC will review driving records to determine whether individuals meet the agency's requirements to operate M-NCPPC vehicles. The Risk Management and Safety Office administers the License Monitoring Program and is responsible for:

- Verifying whether individuals meet requirements to operate an M-NCPPC vehicle.
 - Maintaining and safeguarding drivers' licenses information.
 - Notifying the respective Department Head of any changes in driving records of employees including violations, revocations, suspensions, or other substantive actions which may affect the safe operation of an M-NCPPC vehicle.
 - Updating and retaining the Commercial Driver's License (CDL) database for all M-NCPPC employees authorized to operate commercial vehicles.
 - At least semi-annually, providing each Department Head a listing of all individuals within the department that have met eligibility requirements for driving. Departments shall verify the listing and provide any updates to the Risk Management and Safety Office.
- c) Notification of Changes in Driving Record/Citations/Violations
Drivers of M-NCPPC vehicles must notify their supervisor immediately but no later than one business day of any:
 - Changes in driver's license information or status including but not limited to: changes in name, address, license class, endorsements/restrictions, expiration, suspension or revocation of license.
 - Violations, offenses, or citations resulting in driving restrictions or points on the driving record.
 - Accidents, citations or moving violations received while operating an M-NCPPC vehicle. Penalties for citations and moving violations are the responsibility of the driver.

The supervisor must ensure that the Department Head is made aware of any concerns that must be discussed with the Risk Management and Safety Office regarding the information.

Loss of driving privileges and/or disciplinary action may result from:

- Changes in a driving record, citations, violations or other restrictions (see subsection (d) Review of Driver's License Information, Violations, Suspensions, Revocations, and Accidents below).
- Failure to provide timely notification to management.

- d) Review of Driver's License Information, Violations, Suspensions, Revocations, and Accidents
Changes in an employee's driving record must be reviewed by department management for continued ability to operate an agency vehicle and other potential employment actions.

The Department Head shall consult with the Risk Management and Safety Office and the Human Resources Director on matters related to policy violations; license changes including but not limited to suspensions, restrictions, revocations, or points; and accidents involving an M-NCPPC vehicle, as these may affect the driver's continued operation of M-NCPPC vehicles and result in other potential employment actions. The M-NCPPC may suspend driving privileges whenever continued operation could affect the safety of the driver, other individuals, or the equipment. Additional driver safety training also may be mandated.

Some events/violations/points that result in immediate suspension of M-NCPPC driving privileges include:

- Unsafe operation of an M-NCPPC vehicle.
- Unauthorized use of an M-NCPPC vehicle.
- Driver's license which has been revoked or suspended.
- Driver's license restrictions which do not permit operation of a vehicle during required work hours.
- Violation of the agency's Controlled Substance and Alcohol-Free Workplace policy (Administrative Practice 2-26).
- Controlled substance or alcohol offenses while operating any vehicle. Offenses include but are not limited to, citations, arrests, probations, and convictions.
- Eight (8) or more points on a driver's license.

Licenses which have reached the 5 to 7 point level should be evaluated for potential action. The Department Head should discuss the violation(s) with the driver and consult with the Risk Management and Safety Office and Human Resources Director for appropriate action. Actions may include mandatory completion of driver safety training as identified by the Risk Management and Safety Office and/or suspension of driving privileges.

The duration of the suspension of driving privileges must be determined on a case by case basis depending on the employee's actions, the nature and severity of the action(s) or offense(s) that resulted in the suspension of driving privileges, the length of any probations, suspensions or other restrictions, and the employee's driving record prior to the suspension of driving privileges.

For violations of the agency's Controlled Substance and Alcohol-Free Workplace policy and/or controlled substance or alcohol offenses while operating any vehicle, the department also must determine with the Risk Management and Safety Office whether the employee requires a mandatory referral to the M-NCPPC Employee Assistance Program.

In some situations, more serious disciplinary action may be in order consistent with applicable employment policies.

2. Complete Driver Safety Training

All operators of M-NCPPC vehicles must complete driver safety training. This training may consist of the agency's Defensive Driving Course, specialized driving instruction provided to the Park Police,

and/or other training determined appropriate by the agency's Risk Management and Safety Office and the employee's department.

- a) Training must be completed not more than six (6) weeks after employment, promotion or appointment to a position which requires or permits operation of the M-NCPPC vehicle. If M-NCPPC authorized training has been previously completed, the Department Head may waive a requirement for additional training, following consultation with the Risk Management and Safety Office.
 - b) In exceptional cases, the employee's Department Head may grant a 30-day extension for completion of driver safety training. Appointed Officers and Department Heads must obtain the extension from the respective Planning Board Chair. All extensions must be in writing and forwarded to the Risk Management and Safety Office.
 - c) Failure to take driver safety training will result in a loss of M-NCPPC driving privileges.
3. Comply with No Smoking and Controlled Substance/Alcohol-Free Workplace Policies
Drivers and passengers are prohibited from smoking in any M-NCPPC vehicle (for more details, see M-NCPPC Administrative Practice 2-22, Prohibitions on Smoking, Use of Tobacco Products and Electronic Cigarettes on M-NCPPC Property and in M-NCPPC Vehicles).

Consistent with M-NCPPC Administrative Practice 2-26, Controlled Substance and Alcohol-Free Workplace, and its Administrative Procedures:

- Individuals are prohibited from the manufacture, distribution, sale, presence, or use of controlled substances and alcohol in the workplace including M-NCPPC vehicles and other property; or reporting to work while under the influence of controlled substances or alcohol.
 - Employees are not prohibited from using or carrying valid prescription and over the counter drugs when their use is not intentionally inconsistent with the manner in which it is medically prescribed and their use does not impair job performance or endanger the safety of others while operating M-NCPPC vehicles. However, individuals must immediately report to their supervisors the use of any medication which could impair the ability to operate a vehicle in a safe and effective manner.
4. Comply with Seat Belt Requirements
Seat belts must be worn by the driver and all occupants in M-NCPPC passenger vehicles.
5. Comply with Handheld Device Policy
Pursuant to M-NCPPC Notice, Use of Handheld Devices While Operating a Motor Vehicle, individuals shall not:
- a) Use handheld devices while operating an M-NCPPC vehicle, except in the following situations:
 - Emergency calls to 911 for police, fire, ambulance, hospital or other emergency services.
 - When hands-free equipment is used to operate the device.
 - b) Employees should limit calls even when utilizing a hands-free device and are encouraged to stop at a reasonably safe location to conduct calls in a vehicle. A Department Head may limit use based on assigned duties, performance, and safety record of an employee, group, or class of employees.
 - c) Read, write, or send electronic mail or electronic texts while operating a vehicle. The use of these features is strictly prohibited while operating a vehicle.
 - d) Wear earplugs, headsets or earphones over or in both ears, with the exception for certain devices such as safety headgear, safety earplugs, personal hearing protection and/or prosthetic devices used to aid hearing.

Activities of law enforcement personnel (Park Police Officers) are exempt when those activities fall within the scope of official duty.

Updates to handheld device policies, including permissible exceptions will be issued by M-NCPPC Notice.

IV. General Requirements for Vehicle Identification, Operation, Maintenance, and Security of M-NCPPC Vehicles

A. Required Vehicle Identification

Unmarked vehicles are permitted for the following positions: Planning Board members, Appointed Officers, Department Heads, Deputy Department Heads and designated police vehicles.

All other M-NCPPC vehicles shall have the following identification: M-NCPPC logos affixed to vehicle doors, local government "LG" plates, and agency vehicle identification numbers. Requirements can only be waived by the respective Planning Board Chair(s) as follows:

- Operating Departments: Waivers shall be authorized in writing by the respective Planning Board Chair.
- Bi-County, Central Administrative Services Departments/Operations: Waivers shall be authorized in writing by both Planning Board Chairs.

B. Required Use of Vehicle Mileage Logs

Mileage logs must be maintained by drivers of all M-NCPPC vehicles. The Secretary-Treasurer shall develop and issue vehicle mileage forms. Mileage may be tracked through written reports or electronic devices. Completed logs shall be provided to the Secretary-Treasurer as set forth below and include, at a minimum information on the name and position of the driver, the primary work location, the overnight location of the vehicle (if applicable), the date and purpose of travel including distinctions between business and non-business use if applicable, and beginning and ending mileage. Employees with take home vehicles must identify all one-way commutes between their worksite and home.

Department Heads shall ensure that:

1. Vehicle logs are completed by all operators of M-NCPPC vehicles.
2. Logs for take home vehicles are submitted to the Department of Finance at least semi-annually at the appropriate dates established by the Secretary-Treasurer.
3. Logs for pool vehicles, and onsite assigned vehicles, and vanpools are maintained by the department's Vehicle Administrator. Logs shall be maintained in the department for three years and made available to the Secretary-Treasurer upon request.

The Secretary-Treasurer shall review mileage logs for tax implications, necessary reimbursements to the agency, and other information required to ensure adequate internal controls. Following review, the reports shall be forwarded to appropriate Fleet Manager. Take home mileage logs shall be retained by the Secretary-Treasurer in accordance with the established schedule for payroll documents.

C. Required Vehicle Information and Emergency Contacts

The Fleet Manager shall ensure that all M-NCPPC vehicles contain resource information to assist a driver in operation of the vehicle and handling of emergencies, including:

1. Basic operation manuals;
2. A copy of this M-NCPPC Administrative Practice and any other relevant vehicle use policies;
3. Specific instructions for handling emergencies/accidents including necessary reporting forms;
4. Listing of emergency contacts/numbers for M-NCPPC Park Police, the Risk Management and Safety Office, and the Fleet Management Office);
5. A copy of the vehicle's insurance and motor vehicle registration; and
6. Listing of current M-NCPPC fueling sites and instructions.

D. Handling of Accidents and/or Damage to M-NCPPC Vehicles

1. Reporting Accidents: Vehicle accidents involving others must immediately be reported to the:

- a) Police authorities having jurisdiction for the accident. Drivers should call 911 for all accidents occurring off M-NCPPC property or those that result in injury/fatality. If the location of the accident is on M-NCPPC property, the respective Park Police Division should be contacted. The M-NCPPC Park Police should also be notified if no other police unit is available to respond to the accident. The Park Police can be reached at the following numbers:
 - Montgomery County Park Police: 301-949-3010.
 - Prince George's County Park Police: 301-459-3232.

- b) The immediate supervisor. The supervisor must immediately notify the Risk Management and Safety Office to ensure coordination of the following:
 - 1) Mandatory Post-Accident Testing for Controlled Substance and Alcohol: The supervisor must contact the Risk Management and Safety Office to coordinate testing pursuant to M-NCPPC Administrative Practice 2-26, Controlled Substance and Alcohol-Free Workplace. This policy requires drivers involved in an accident while operating M-NCPPC vehicles to undergo testing no later than eight (8) hours from the time of the accident. The Risk Management and Safety Office will coordinate testing with the M-NCPPC's medical review officer, including any special arrangements for testing of injured employees who are unable to travel to a specific testing facility.
 - 2) Necessary investigations.
 - 3) Claims reporting.

The Risk Management and Safety Office can be contacted at:

- 301-454-1686/1693 (during regular business hours); or
- 301-275-5125/5126 (after regular business hours).

2. At the Scene of the Accident:

- a) The driver and passengers of M-NCPPC vehicles shall not discuss or admit liability with the other parties or claimants.
- b) The driver should not move the M-NCPPC vehicle until appropriate authorities arrive and have prepared any necessary reports.
- c) The driver of the M-NCPPC vehicle should exchange insurance information and contact details with other parties to the accident. Information that should be exchanged includes:
 - 1) Information on the M-NCPPC's vehicle insurance card shall be provided to the other party involved in the accident.
 - 2) A referral to the M-NCPPC's Risk Management Office: 301-454-1686.
 - 3) If a police report is not taken at the scene, the driver of the M-NCPPC vehicle shall obtain the other driver's name, address, phone number and insurance information.
 - 4) Obtain witness information and any other pertinent information such as: weather conditions, road conditions and location of the accident.
 - 5) If the accident results in damage to unattended vehicle or property, the driver should make a reasonable effort to locate the owner of the damaged vehicle or property; notify them of the incident; and exchange insurance, license and M-NCPPC contact information. If the owner cannot be located, this information should be left in a secure and conspicuous location.

3. Following the Accident:

- a) A copy of the police report shall be forwarded to the Risk Management and Safety Office by the next business day, or as soon as it is made available to the driver or his/her department.
- b) Upon notification of the accident and no later than next business day, the supervisor must complete an accident report with the Risk Management and Safety Office.
- c) The Risk Management and Safety Office will coordinate handling of the accident investigation, liability assessments, subrogation, and legal review.

E. Vehicle Parking and Security

When parking an M-NCPPC vehicle, the driver should take reasonable precautions to safeguard the vehicle and its contents from theft and damage. When vehicles are approved for overnight use, they must be kept at the location authorized by M-NCPPC.

M-NCPPC facility managers should take steps to discourage theft and damage of agency vehicles.

1. The facility manager shall work with Park Police and the Fleet Manager to establish protocols for maintaining vehicle security at each site.
2. Parking spaces shall be clearly marked. Designated parking spaces shall be located in conspicuous locations close to the building.
3. Care should be taken to ensure that building and parking lot lights work properly through daily and routine checks.

F. Penalties for Citations and/or Violations Incurred While Operating an M-NCPPC Vehicle

Penalties for any violations including moving violations, parking tickets, and other driver-controlled citations are the responsibility of the employee. All fines must be paid in a timely manner. All citations or violations must be reported to the Department Head.

When circumstances so justify, the Department Head may approve parking violation reimbursement by the agency.

G. Use of Vehicle for Political/Partisan Activities

Drivers are prohibited from using M-NCPPC vehicles while engaged in or attending any political or partisan activity not directly connected to official M-NCPPC business. Such activities may include rallies, caucuses, promotional events, political speeches and fundraisers, and/or driving to the polls for a candidate or a party.

H. Personal Equipment/Signage

Drivers shall not permanently install personal equipment in any agency vehicle without the written approval of the Department Head and the respective Fleet Manager. Individuals will be responsible for all costs associated with any damages or repairs resulting from the removal of unauthorized installations.

Drivers are prohibited from placing any personal bumper stickers, decals, placards, banners, signs or insignia on any M-NCPPC vehicle without prior authorization from the Department head and respective Fleet Manager.

I. Fueling Stations for M-NCPPC Vehicles

M-NCPPC fueling sites are used to help control fuel costs and track usage by authorized individuals. Authorized drivers of agency vehicles are asked to utilize these sites whenever possible. Use of external fueling sites should be minimized (see also Section I, Value and Taxability of M-NCPPC Vehicle Use, Stipends, and Reimbursement of Authorized Travel Expenses).

Unauthorized use of fuel is strictly prohibited and may result in disciplinary action up to and including termination.

To ensure accountability and appropriately track fuel usage, the Department Head shall ensure that departmental fueling sites secure the property and prevent unauthorized use. At a minimum, measures should include:

1. Posting visible signage indicating that fuel is only intended for use in M-NCPPC vehicles.
2. Implementing controls which restrict fuel use to M-NCPPC vehicles. Departments should consult with the Park Police to develop controls.
3. Verifying the identification of authorized users of M-NCPPC fueling stations.

4. Recording and monitoring fuel usage to include names of individuals receiving fuel, quantity of fuel dispensed, and vehicle identification number.
5. Reviewing logs/reports of fuel usage for any discrepancies or other concerns.
6. Reporting mechanisms to alert the Department Head of any unauthorized use of fuel or attempts to use fueling stations without authorization.

J. Vehicle Maintenance/Cleanliness

1. The Fleet Manager is responsible for:
 - Developing vehicle maintenance and rotation schedules for M-NCPPC vehicles to ensure effective and efficient operation of such vehicles.
 - Ensuring that vehicle registrations remain current and that vehicles comply with safety/emission standards.
 - Notifying the departmental Vehicle Administrators of any scheduled maintenance/repairs, vehicle rotation, and/or necessary vehicle testing/registration requirements.
 - Coordinating the use of temporary vehicles (if available) during repair or maintenance of M-NCPPC vehicles.

2. Operators of M-NCPPC vehicles are responsible for:
 - Maintaining the cleanliness of the interior of the vehicle.
 - Promptly reporting any mechanical or service concerns to the Vehicle Administrator for appropriate action.
 - If mechanical difficulties are experienced while away from M-NCPPC facilities, the driver shall attempt to contact the departmental Fleet Manager for determination of appropriate action.
 - If the Fleet Manager is not available when a repair requires immediate attention, the driver must obtain documentation explaining the required repairs, the name and contact information of the service provider, the itemized costs of the repair, and any receipts supporting reimbursement of repairs.

RESPONSIBILITIES Planning Board Chair(s) shall:

- Approve or disapprove vehicle assignments as outlined in this Practice including but not limited to, take home vehicles; onsite vehicles specifically designated to an individual; implementation of vanpools; and significant modifications of vehicle replacements, changes in type, duration of assignment and changes in offsite location of take home vehicle.
- Review the Annual Authorized Vehicle Assignment Report submitted by the Secretary-Treasurer. At this time, the respective Planning Board Chair shall consider reauthorization of ongoing vehicle assignments.
- Forward to the Commission for its review, a copy of the Annual Report of Authorized Vehicle Assignments.

Executive Director shall:

- Each year, establish the mileage reimbursement rate for business use of private vehicles. The rate shall be based on input by the Secretary-Treasurer and current Internal Revenue Service standards.
- Issue Administrative Procedures for implementation of this Practice as recommended by the Secretary-Treasurer.

The Secretary-Treasurer shall:

- Establish record-keeping requirements to ensure adequate reporting for purposes of determining taxable income, reimbursements, stipends, or other vehicle use decisions.
- Develop and issue Vehicle Assignment Authorization Forms and maintain the official file for approved vehicle assignments.

- On a semi-annual basis, solicit an updated list of vehicle assignment information from Department Heads.
- Determine whether vehicle use falls within Internal Revenue Service requirements for taxable income or mileage reimbursement by the employee.
- Calculate and provide oversight of payroll adjustments relating to taxable income, stipends and mileage reimbursements.
- Provide written notification to employees of appropriate taxable income and/or required reimbursements.
- Forward copies of approved vehicle assignments to the respective Fleet Manager.
- Present an annual, year-end report to the Executive Committee of all authorized vehicle assignments so they may be reviewed for reauthorization by the respective Planning Board Chair(s).
- Develop necessary procedural guidance and forms to assist departments/individuals on issues related to taxation, reimbursements, vehicle assignment and usage forms.

Department Heads shall:

- Ensure that vehicle use complies with requirements for driver eligibility, safety and authorized use.
- Review all vehicle assignments at least semi-annually to determine continued need; and provide updated listing to the Secretary-Treasurer of all authorized assignments, revocations or other changes.
- Designate a departmental Vehicle Administrator to maintain listings of authorized drivers who meet driving eligibility requirements, all vehicle assignments, and vehicle usage logs. Report approved vehicle assignments to the Secretary-Treasurer to ensure compliance with requirements for authorization, recordkeeping, and Internal Revenue Service regulations for purposes of tax reporting.
- Ensure that significant modification in assignments previously approved by the Planning Board Chair(s) are reported for reauthorization (i.e. vehicle upgrades, replacements, changes in type duration of assignment, changes in offsite location of take home vehicle).
- Ensure that necessary information for taxable income and/or reimbursements purposes is captured in recommending a vehicle assignment to forward to the Secretary-Treasurer.

Risk Management and Safety Office shall:

- Administer the M-NCPPC Driver License Monitoring Program as described in this Practice.
- Administer the Controlled Substance and Alcohol testing program, to include guidance to management and employees on requirements related to post-accident testing.
- Notify the respective Department Head of any changes in driving records as reported to the Office by State/local authorities, compliance agencies, and/or motor vehicle administrations.
- At least semi-annually, provide each Department Head a listing of all individuals within the department that have met eligibility requirements for driving.
- Coordinate review of any vehicle accidents or damage.

The Fleet Manager shall:

- Provide oversight for fleet cars for respective departments.
- Coordinate the order and purchase of vehicles after evaluating the intended use of the vehicle. Decisions should reflect cost containment, compliance with purchasing policies, and effective use of agency resources.
- Manage the maintenance and repair of M-NCPPC vehicles.
- Coordinate temporary replacement of vehicles to permit continued program operations. Replacement vehicles are subject to available resources and Department Head approval.
- Compile and distribute annually to respective departments, a listing of all available M-NCPPC fueling and maintenance sites.

- Compile, track, and report costs related to vehicle operations, fueling, maintenance and repairs.
- Provide to the Secretary-Treasurer, necessary information related to the calculation of taxable fringe benefits including vehicle operation costs.
- Ensure that all vehicles include items listed in Section IV (Subsection C, Required Vehicle Information and Emergency Contacts).

Departmental Vehicle Administrators shall:

- Coordinate the scheduling, availability, tracking of departmental pool vehicle use. Issue guidance to departmental employees on procedures for use of pool vehicles.
- Verify drivers' eligibility to operate agency vehicles consistent with this Practice.
- Maintain departmental vehicle usage logs for a period of at least three years.
- Coordinate maintenance of M-NCPPC vehicles with the Fleet Manager.
- Notify Facility Manager of any security concerns regarding departmental vehicles.
- Notify the Department Head of any violations of vehicle use policies.

VIOLATIONS Violations of driving requirements or agency vehicle use provisions contained in this Practice may result in disciplinary action up to and including termination. Drivers are fully responsible for all fines and/or penalties associated with citations and moving violations that occur directly from their operation of an M-NCPPC vehicle.

Consistent with M-NCPPC Administrative Practice 2-15, Employee Use of Commission Property, any expenses incurred from an employee's unauthorized use of M-NCPPC property will be recovered by the M-NCPPC through direct repayment of such expenses by the employee, or collection of such expenses through payroll deduction. The agency reserves the right to determine the method of recovery of such expenses and to pursue legal action for collection of any monies owed by an individual.

PROCEDURES The Secretary-Treasurer shall develop and recommend Administrative Procedures to the Executive Director for implementation of this Practice. The Executive Director will issue Procedures following consultation with Department Heads.

Attachments:

Driving Requirements and Record Release Authorization Form

Driving Requirements and Record Release Authorization Form

All employees authorized or required by their job duties to operate M-NCPPC vehicles must enroll in the Driver's License Monitoring Program. M-NCPPC Vehicles covered under this program include any passenger car, van, truck, heavy equipment or other type of motorized vehicle requiring a driver's license to operate under Maryland Law.

Each department shall ensure that employees complete the attached form at the time of an employee's hire, promotion, or assignment to a position which requires or authorizes driving of an M-NCPPC vehicle. This form must be completed prior to an employee's operation of an assigned vehicle or any pool vehicle. The completed form shall be forwarded to the Risk Management and Safety Office so the employee can be enrolled into the Driver's License Monitoring Program.

The Maryland-National Capital Park and Planning (M-NCPPC)
Driving Requirements and Record Release Authorization Form

All employees authorized or required by their job duties to operate M-NCPPC vehicles must enroll in the Driver's License Monitoring Program. M-NCPPC vehicles covered under this program include any passenger car, van, truck, heavy equipment or other type of motorized vehicle requiring a driver's license to operate under Maryland law.

Each department shall ensure that this form is completed at the time of an employee's hire, promotion, or assignment to a position which requires or authorizes driving of an M-NCPPC vehicle. The form must be completed prior to an employee's operation of an assigned vehicle or any pool vehicle. The completed form shall be forwarded to the Risk Management and Safety Office so the employee can be enrolled into the Driver's License Monitoring Program.

Employee's Full Name: _____ **Date of Birth** (mm/dd/yy) ___ / ___ / ___
First Middle Last

Home Address: _____

License/Driving Information:

Driver's License Number: _____ Issuing State: _____
License Class _____ License Endorsements _____ License Expiration: _____
Restrictions noted on Issued License or Driving privileges _____
Have you completed a Defensive Driving Course or Park Police Driver Training? Yes No
(if yes, provide date) (mm/dd/yy) ___ / ___ / ___

Work Location:

Department _____ Work Phone: _____
Work Address _____

Use of M-NCPPC vehicles is based on my position's minimum qualifications and/or assigned duties and my ability to meet any driver qualifications established by the Commission with respect to such use.

By signing below, I expressly grant the M-NCPPC permission to obtain copies of my driving record directly from the applicable Motor Vehicle Administration. I understand that I may also be required to furnish a written copy of my driving record from the Motor Vehicle Administration that issued my license. The driving record will be used to determine whether I meet the agency's driving requirements to operate M-NCPPC vehicles. I acknowledge that I have received copies of Commission policies governing the use of Commission vehicles. One of the requirements of the policy is that all drivers of M-NCPPC vehicles must complete the Defensive Driving Course within 6 weeks of employment (including promotion or assignment) into a position which requires driving. I am also required to meet this Defensive Driving requirement if I operate a Commission vehicle for any other purpose.

I understand that I am required to notify my supervisors and the Risk Management and Safety Office immediately of any changes in my license (including but not limited to: changes in name, address, license class, endorsements/restrictions; expiration of license; or any violation). Failure to meet any requirement outlined in this Form or Practice 6-10 will result in the immediate revocation of M-NCPPC driving privileges, and may impact my continued employment.

This authorization is valid as long as I remain an employee of M-NCPPC, and a photocopy of this authorization and my signature shall constitute a valid authorization, even without an original signature. I understand that I may revoke this authorization by providing written notice to the Risk Management and Safety Office in the event my assigned position does not require me to operate M-NCPPC vehicles. I further understand that such revocation prevents me from driving any M-NCPPC vehicle for any purpose whatsoever.

Employee Signature

Date of Signature

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SECTION 3.04 Property Damage

It is important that all incidents involving property damage be reported to the Risk Management and Safety Office. Prompt reporting will greatly aid in the investigation of the property loss and reduce or minimize the potential for further damages.

Purpose:

The purpose of this Directive is to inform all Commission employees about reporting incidents involving property damage to third parties or to property belonging to the Commission. Prompt reporting does several things:

- Provides the information to our third party claims administrator, who is responsible for accepting, adjusting or denying the claim.
- Makes follow-up investigations easier since conditions may change over time.
- Helps the Commission to recover more quickly from people who damage our parks and facilities.
- In the case of theft or destruction of equipment and facilities, reporting removes it from our inventory and may reduce insurance premiums. If you replace or repair the loss, a prompt report will help to get the equipment back in service quickly or the facility repaired promptly.
- Reduces the potential for a lawsuit. The longer it takes to process and/or investigate information, the more irate a citizen becomes with the Commission, which may in itself prompt a lawsuit.

Applicability:

The following Directives apply to property damage claims other than vehicle accidents. Please refer to Directive for handling Vehicle Accidents.

Procedures:

In the event of damage to Commission property, and or property of a third party the following procedures should be followed as applicable, in order to ensure the proper handling of claims.

- For fire emergencies, injuries, explosions, hazardous spills etc call 911 first.
- For serious accidents involving injuries, hazardous material
- Notify supervisor of accident
- Contact Risk Management for direction on handling/responding to investigation of serious damage
- For non-serious property damage claims- proceed with obtaining information including
- Names
- Descriptions
- Secure the area, if possible, from further damage and to limit access to the public,
- Take photographs and measurements whenever possible,
- Complete the information required on the Property Damage Form,
- Obtain pertinent information, such as; names, addresses, phone numbers,
- Seek out witnesses and obtain the same pertinent information,

- Give a brief narrative describing the alleged incident, without admitting liability (the narrative should contain the what, when, where and how),
- The Supervisor must enter their name, title and date in the appropriate box,
- Send the original copy of the report to the Risk Management and Safety Office **immediately**,
- Show concern but **DO NOT** admit liability or offer to pay any bills for damages when a third party is involved.
- If the party is hostile, starts talking about the Commission paying bills or they are obtaining the services of an attorney, be polite, and have them contact the Risk Management and Safety Office,
- After hanging up with the third party, **immediately notify the Risk Management and Safety Office at, (6) 1693 or (6) 1692.**

The Supervisor must complete the appropriate form for Property Damage. A sample copy of this report is included with this procedure. You can obtain a copy of this form via the intranet or by contacting the Risk Management and Safety Office.

Caution: Employees involved in an accident and in the administrative processing of accident reports or claims must not admit or discuss liability with the other parties or claimants, since such information may be used in a prejudicial way against the Commission. It is beyond the scope of an employee's authority to admit liability or accept responsibility for an accident or incident.

Should you have questions on the above Directives involving property damage to the general public, please contact the Risk Management and Safety Office for further guidance or clarification.

Appendices:

Appendix A – Property Damage Report Form

Appendix A – Property Damage Report Form

PROPERTY DAMAGE REPORT FORM

M-NCPPC Location Code: _____ (Risk Management Use Only)

Claimant information:

Name: _____ Phone Number: _____

Address: _____

If third party is responsible for damage, complete the following:

Name: _____ Phone Number: _____

Address: _____

Accident Date: ____/____/____ Time of Accident: ____:____ AM PM

Facility Location: _____

Cause of Damage:

Fire Theft Storm Vandalism Other: _____

Type of Property Damage: Building Contents of Building Tree Turf

Play Equipment Fence Other (explain) _____

Were Park Police Notified of Damage Yes No

Park Police Report Number: _____

Describe briefly how the damage occurred:

Estimate to repair or replace: _____

Person Reporting: _____

Phone Number: _____ Date of Report: ____/____/____

Signature of Reporting Person: _____

Signature of Supervisor: _____

Complete the form to document all property damage. Fax a copy to the Risk Management and Safety Office. Fax (301) 454-1714

This form was prepared in anticipation of litigation

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SECTION 4.01 Insurance

The Commission's insurance programs are handled through self-insured and commercially insured programs as well as internal risk transfer programs such as the requiring of certificates of insurance and Indemnity and Hold Harmless clauses for vendor contracts. These programs are managed through the Commission's Risk Management and Safety Office. This Office is also charged with developing and implementing the Commission's internal loss control program to reduce workplace accidents and injuries through training, inspections and regulatory compliance, programmatic risk assessments and insurance review of vendor contracts.

For its self-insured program, the Commission participates in the Montgomery County Self-Insurance Program (the "Program") for the purpose of economic pooling of risks and resources. There are over 14 entities which participate in the Program including: Montgomery County Government, Montgomery County Public School System, Montgomery College, the City of Rockville, the Montgomery County Revenue Authority, the Housing Opportunities Commission of Montgomery County, the Housing Authority of the City of Rockville, the Town of Somerset, the City of Gaithersburg and the Village of Martin's Addition and the City of Takoma Park.

The Program is administered by an Inter-Agency Insurance Panel, comprised of representatives of each of the participating entities. This panel formulates insurance policy, reviews claims for settlement and evaluates the effectiveness of the loss control program, and develops recommendations for minimizing potential losses. The Program provides substantial savings in commercial insurance costs and the benefit of claims management systems including a third-party claims management firm--Managed Care Innovations, and the Montgomery County Attorney's Office to administer the legal requirements of the Program.

The Program provides the Commission with insurance coverage for workers' compensation (Maryland State mandatory limits), comprehensive general liability, automobile liability (first and third-party claims), police professional liability, property and fire damage, boiler and machinery damage, and data processing systems breakdown.

By State law effective July 1, 1987, local government entities, including the Commission, are protected by the Local Government Tort Claims Act. Under this legislation, the liability of the Commission for common law torts, such as negligence, is limited to \$200,000 for an individual claim, and \$500,000 for all claims arising from one occurrence. This act significantly decreases the exposure of the Commission to large losses.

Each year, the Commission pays to the Program Fund an amount for Montgomery County and Prince George's County, individually, equal to the estimated claims for that county for the ensuing year, as well as the estimated share of the operating costs of the Program Fund for each county for that year.

The Commission has, in addition to the self-insurance coverage, further liability and property loss coverage through the direct purchase of commercial policies for claims arising out of the operation of a public airport, and loss or damage to antiques and other specific items of personal property. The Commission also has honesty bond coverage for its public officials and employees.

Appendices:

Appendix A – Sample Certificate of Liability Insurance

Appendix A – Sample Certificate of Liability Insurance


ACCORD Certificate of Liability Insurance		Date (MM/DD/YY) 09/17/99
Producer Sedgwich of Washington, Inc. P.O. Box 2151 Spokane, WA 99210-2151 Phone: 509-358-3900 Fax: 509-358-3937	This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below	
Insured Priority Freight Lines, Inc. P.O. Box 58626 Seattle, WA 98138	Insurers Affording Coverage	
	Insurer A: Atlantic Mutual Insurance Company Insurer B: Atlantic Mutial Company Insurer C: Insurer D: Insurer E:	

Sample

Coverages
 The policies of insurance listed below have been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. Aggregate limits shown may have been reduced by paid claims.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE	POLICY EXPIRATION DATE	LIMITS
A	General Liability <input checked="" type="checkbox"/> Commercial General Liability <input type="checkbox"/> Claims made <input checked="" type="checkbox"/> Occur <input type="checkbox"/> <input type="checkbox"/> General aggregate limit applies per: <input type="checkbox"/> Policy <input type="checkbox"/> Project <input checked="" type="checkbox"/> Loc	298412437	08/10/1999	Until Cancelled	Each Occurrence \$ 1,000,000 Fire damage (any one fire) \$ 100,000 Med exp (any one person) \$ 5,000 Personal & adv injury \$ 1,000,000 General aggregate \$ 2,000,000 Products - comp/top agg \$ 2,000,000
A	Automobile Liability <input checked="" type="checkbox"/> Any auto <input type="checkbox"/> All owned autos <input type="checkbox"/> Scheduled autos <input checked="" type="checkbox"/> Hired autos <input checked="" type="checkbox"/> Non-owned autos <input checked="" type="checkbox"/> Truckers _____	298412437	08/10/1999	Until Cancelled	Combined single limit (each accident) \$ 1,000,000 Bodily injury (per person) \$ Bodily injury (per accident) \$ Property Damage (per accident) \$ Auto only - each accident \$ Other than Auto only: EA ACC \$ AGG \$
	Garage Liability <input type="checkbox"/> Any auto <input type="checkbox"/>				Auto only - each accident \$ Other than Auto only: EA ACC \$ AGG \$
B	Excess Liability <input checked="" type="checkbox"/> Occur <input type="checkbox"/> Claims made <input type="checkbox"/> Deductible <input checked="" type="checkbox"/> Retention \$10,000	298412437	08/10/1999	Until Cancelled	Each occurrence \$ 1,000,000 Aggregate \$ \$ \$ \$
	Workers Compensation and Employers Liability				W/C statutory limit \$ E.L. each accident \$ E.L. Disease - Ea. emp. \$ E.L. Disease - Policy Limit \$
	Other				

Description of operations / locations / vehicles / exclusions added by endorsement / special provisions for insurance verification

Insured's copy	Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives. Authorized Representative: 
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SECTION 4.02 Vendor Contracts

As a public agency, the Commission uses many third-party contractors and vendors. Consequently, liability can become a real issue. Therefore, the Commission must ensure that the third party can finance any losses it creates and that it can lower the Commission's exposure to risk as well. This is usually done in a number of different ways, such as hold-harmless agreements, additional/named insured provisions, and certificates of insurance as outlined below.

APPLICATION

Pursuant to the Commission's Contract Manual, all contracts (except those under low risk categories) require vendors to provide evidence of insurance. Additionally, each written contract shall include a hold harmless clause regardless of whether insurance is required for a specific risk.

DEFINITIONS

Additional/named insured: provisions that enable a public entity to be named as an additional insured on the third party's coverage. This is important, as it allows the third party's insurance coverage to extend fully to the public entity.

Certificate of insurance: this is a document that provides evidence that insurance is in place to provide coverage for a risk in question. This is usually available from broker/agents and insurance companies.

Hold-harmless agreements: contractual transfers of risk that effectively enable one party to escape potential liability.

DIRECTIVES

Contracts and Insurance

When making contracts and various kinds of written agreements, it is proper for the parties to assume their proper share of whatever liabilities may arise from the agreement. It is generally in the Commission's best interest to transfer as much responsibility as possible to the other party. Use Commission Practice 4-14 as your guide to processing contracts and other written agreements.

Types of contracts and agreements now in use are as follows:

- Concessionaire Agreement
- Consultant Agreement
- Instructor's Agreement
- Theatre Performance Agreement
- Scenic Easement Agreement
- Right-of-Way Agreement
- Construction Contract
- Land Purchase Contract
- Architectural Design Contract
- Grant Contracts

- Farm Lease Agreements
- Lessor's Lease Agreements

Recommended Clauses for Contracts/Agreements

1. *“Hold Harmless Clause”* is a legal statement by the other party to our contract, that we will not be held liable for their negligent acts. All contracts or agreements should include this clause. The wording of the clause may vary because of the type of contract, agreement or lease.
 - a. *Hold Harmless and Indemnification language shall be used as found in the Contract Manual. Additionally, consult with Legal for specialized indemnification language.*
2. *Comprehensive Auto and General Liability Clause:* In addition to the “Hold Harmless Clause,” it is important that the other party to the contract, who has assumed liability, be funded with insurance so he/she has the ability to pay the damages for which he/she becomes liable.
3. *Workers’ Compensation Clause:* The workers’ compensation act was passed by the State of Maryland to provide compensation for loss of earnings resulting from accidental injuries sustained in the course of employment. If the other party to a contract does not have workers’ compensation insurance, the Commission may be liable for payment to the contractor and his/her employees. Therefore, it is important that all parties of a contract include a clause for workers’ compensation.
4. *Certificate of Insurance:* A certificate of insurance is a document signed by the legal representative of the insurer that verifies the entity’s compliance with the insurance requirements of vendors, contractors and suppliers of services. The certificate should accompany any contract or agreement when processed for review and execution. All parties to a contract or agreement with the Commission must submit a certificate of insurance. There are several types of certificates that the other party may submit; normally, the other party’s insurance agent will provide this certificate. Contact the Risk Management Office when the other party requires a certificate from the Commission.

In order to ensure that the Commission is adequately protected against potential liability arising from use of third party contractors, the certificate of insurance must include the following:

- List full insurance amounts as defined in the scope of the contract and/or as defined in the Commission’s Contract Manual. Specific questions regarding insurance amounts may also be directed to Risk Management at 301-454-1692/1693.
- Be included with each contract. Risk Management does NOT keep Certificates of Insurance on file. Certificates of Insurance from prior contracts cannot be used by Risk Management because it is possible that Certificates are no longer valid, have become canceled and/or amended. Therefore, contract originators must obtain a current Certificate of Insurance from vendors and attach to the contract prior to routing.
- List the Commission as an “Additional Insured.” This is done by having the insurance company list the Maryland-National Capital Park and Planning Commission as an Additional Insured under the section titled “DESCRIPTION OF OPERATIONS/LOCATIONS/ VEHICLES/SPECIAL ITEMS.” Please note: **CERTIFICATE HOLDER DOES NOT MEAN ADDITIONAL INSURED. (See Appendix A for Sample Certificate).**
- Include insurance coverage for the entire contract term. If the Certificate of Insurance provides coverage only for a portion of the contract period, it is the responsibility of the

Contract Administrator to track the expiration of the insurance coverage and obtain an updated Certificate prior to the expiry date of the initial certificate. The updated Certificate must be forwarded to the Purchasing Office, Department of Finance, for inclusion in the Contract's file.

A sample certificate of insurance is provided as Appendix (A) in this section. This checklist is currently under review and may be revised in the future.

Purchasing

There are two items of Risk Management importance in Commission Practice 4-10 on purchasing. One has to do with purchasing materials and supplies, and the other concerns contracts.

First, ensure that vendors provide supplies, materials, and equipment that are in compliance with appropriate state and federal health and safety regulations, including those of the Maryland Occupational Safety and Health Act (MOSHA) and the Consumer Product Safety Commission. Vendors of chemicals including solvents, weed killers, paints, and art supplies shall ensure that containers are properly labeled. A material safety data sheet (MSDS) must also be provided on each chemical product.

Second, construction contracts shall require that the contractor comply with all provisions of MOSH standards of construction (29 CFR 1926).

Appendices:

Appendix A – Sample Certificate of Insurance


Appendix A – Sample Certificate of Insurance

ACCORD Certificate of Liability Insurance		Date (MM/DD/YY) 09/17/99
Producer Sedgwich of Washington, Inc. P.O. Box 2151 Spokane, WA 99210-2151 Phone: 509-358-3900 Fax: 509-358-3937	This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below	
Insured Priority Freight Lines, Inc. P.O. Box 58626 Seattle, WA 98138	Insurers Affording Coverage	
	Insurer A: Atlantic Mutual Insurance Company Insurer B: Atlantic Mutial Company Insurer C: Insurer D: Insurer E:	

Coverages
 The policies of insurance listed below have been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. Aggregate limits shown may have been reduced by paid claims.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE	POLICY EXPIRATION DATE	LIMITS
A	General Liability <input checked="" type="checkbox"/> Commercial General Liability <input type="checkbox"/> Claims made <input checked="" type="checkbox"/> Occur <input type="checkbox"/> <input type="checkbox"/> General aggregate limit applies per: <input type="checkbox"/> Policy <input type="checkbox"/> Project <input checked="" type="checkbox"/> Loc	298412437	08/10/1999	Until Cancelled	Each Occurrence \$ 1,000,000 Fire damage (any one fire) \$ 100,000 Med exp (any one person) \$ 5,000 Personal & adv injury \$ 1,000,000 General aggregate \$ 2,000,000 Products - comp/top egg \$ 2,000,000
A	Automobile Liability <input checked="" type="checkbox"/> Any auto <input type="checkbox"/> All owned autos <input type="checkbox"/> Scheduled autos <input checked="" type="checkbox"/> Hired autos <input checked="" type="checkbox"/> Non-owned autos <input checked="" type="checkbox"/> Truckers _____	298412437	08/10/1999	Until Cancelled	Combined single limit (each accident) \$ 1,000,000 Bodily injury (per person) \$ Bodily injury (per accident) \$ Property Damage (per accident) \$
	Garage Liability <input type="checkbox"/> Any auto <input type="checkbox"/>				Auto only - each accident \$ Other than EA ACC \$ Auto only: AGG \$
B	Excess Liability <input checked="" type="checkbox"/> Occur <input type="checkbox"/> Claims made <input type="checkbox"/> Deductible <input checked="" type="checkbox"/> Retention \$10,000	298412437	08/10/1999	Until Cancelled	Each occurrence \$ 1,000,000 Aggregate \$ \$ \$ \$
	Workers Compensation and Employers Liability				WC statutory limit \$ E.L. each accident \$ E.L. Disease - Ea. empl. \$ E.L. Disease - Policy Limit \$
	Other				

Description of operations / locations / vehicles / exclusions added by endorsement / special provisions for insurance verification

Insured's copy	Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives. Authorized Representative: 
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SECTION 4.03 Procurement – Low Risk Activities

On January 31, 1990, The Executive Committee approved procurement of certain types of Low Risk Activities by purchase order (Field or Central) in lieu of contracts.

Commission Practice 4-10, Section 7c(4) (page 20) sets forth:

Low Risk Activities Purchases

The Secretary-Treasurer will issue a list of Low Risk Activities, which can be procured by purchase order (Field or Central), not to exceed \$3,000 in lieu of purchases by contract. The Secretary-Treasurer will revise this list periodically. Purchases of items (goods and services) not included on this list will require a contract.

The Secretary-Treasurer has final authority when clarification is required of whether a purchase qualifies for purchase-by-purchase order (Field or Central).

When deemed appropriate by the Secretary-Treasurer, proof of insurance at prescribed limits may be required for certain Low Risk Activities. For such purchases, attach a Certificate of Insurance to the purchase order (Field or Central) certifying adequate insurance and forward the purchase order to the Purchasing Division. The Secretary-Treasurer will obtain input from the Risk Manager on insurance concerns.

Pursuant to my authority under Commission Practice 4-10 (Purchasing) attached to this Notice are schedules of:

- List of services, which may be procured using purchase orders in lieu of contracts.
- List of services, which may be procured, using purchase orders providing that proof of insurance, is obtained.
- List of prohibited services.

Items not specifically listed may not be procured by this procedure.

ACTIVITIES PERMITTED ON FIELD PURCHASE ORDERS (Limit \$3,000)

Instructions/Demonstrations/Workshops

- Adult Education
- Arts and Crafts
- Blacksmithing
- Bridge Lessons
- Cake Decorating
- Career Development
- Cartooning
- Color Analysis-Dress and Makeup
- Computer Skills
- Cooking Lessons
- Cornhusk Doll Making
- Costume Making
- Counselor-Day Camp
- Dance Lessons-Adult and Children (except health and fitness activities)

- Dog Grooming
- Dog Obedience
- Drawing/Painting-Oil, Watercolor, Finger, etc.
- Face Painting
- Flower Arrangements
- Fossil Hunting
- Gardening
- Genealogy
- Grooming-Personal Appearance
- Interior Design
- Speakers (i.e., pre-service, safety workshops)
- Makeup Application
- Management Workshops-Time and Stress Management, Leadership Skills, etc.
- Modeling
- Personal Appearance Demonstrations
- Photography Lessons
- Playwriting
- Puppet Making
- Sheep Shearing
- Sign Language Interpretation
- Silk Screening
- Sports Demonstration (non-participatory)-Baseball, Basketball, Bowling, Boxing, Golf, Ice Skating, Kick Boxing, Roller Skating, Tennis, etc.
- Tax Preparation
- Teaching-Pre-School
- Vocal Instruction
- Wardrobe/Dress
- Wood Carving

Performers/Entertainers

- Artists
- Balloonologists
- Circus Performers
- Clowns
- Dancers
- Disc Jockeys
- Drama Productions
- Jugglers
- Lecturers
- Magicians
- Master of Ceremony
- Mime
- Musicians-Band, Orchestra, Concerts, Recitals
- Palm Reading
- Poetry Reading
- Puppeteers
- Reptile Shows (FPO must state “non-venomous snakes”)
- Roving Leprechauns
- Singers Speakers
- Sports Officials (Referees, Umpires, etc.)
- Square Dance Callers
- Story Telling

- Theatrical Performers and Performances
- Ventriloquists

Services

- Carpet Cleaning
- Equestrian Services:
 - Announcers at shows
 - Blacksmiths
 - Horse-shoeing
 - Judges
 - Jump and Timer Crews
 - Mutuel Clerks
 - Ring Stewards
 - Ringmasters
 - Secretaries at shows
- House Inspectors, Appraisers solely for determining rental value
- Janitorial/Cleaning (during scheduled work hours only)
- Judges
- Linen Services
- Photographers (except topographical, aerial, etc)
- Pumping Services-Dry Wells, Tanks, Septic, Roto Rooter, etc.
- Trash Hauling
- Veterinary
- Window Washers (ground level only)

Rentals

- Comfort Stations
- Equestrian Equipment-Jumps, Timers, etc.
- Equipment-small
- Food Equipment (Cotton Candy, SnoCones, Popcorn, Beer) (operated by Commission employees)
- Lighting and Sound Equipment, including piano rentals
- Tents, Small Canopy
- Tools, Small Equipment and Machines
- Demurrage charges for acetylene and oxygen tanks

Miscellaneous

- Advertising-Val Pac Type and general
- Contracts/Agreement with Private industrial Council, Indian, Manpower
- Health Department Facility Licensing/Renewals (SACC Program)
- Participatory Activities-Bowling

The following can be procured via purchase order provided that proof of insurance is obtained. Required coverage is \$300,000 General and Product Liability for each of the below:

- Pest Control/Extermination Services
- Construction/Office Trailer Rentals
- Bus/Van Rental Services, including driver
- Fire Protection Systems
- Tents
- Moving Services

- Equipment Maintenance
- Pony Rides-Roller Skating
- Janitorial/Cleaning (outside of regular work hours)
- Window Washers (except ground level)

Bus/Van services vendors must show proof of the minimum level of Automobile Liability Insurance required by State Law, or documentary evidence that the vendor is an approved Self-Insurer.

Any requirement that the Commission sign a Maintenance Agreement will require a contract and will preclude the use of a purchase order.

NOTE: Pursuant to Commission Practice 4-10, the Secretary-Treasurer is authorized to approve waivers of standard insurance provisions.

List of Activities Which are considered High Risk and May Not Be Procured By Purchase Order

- Adventure trips (white water rafting, spelunking, tubing, hang-gliding, horseback riding, go-karts, canoeing, windsurfing, scuba diving, flying)
- Amusement ride rentals
- Catering food services
- Gymnastics instruction
- Health and fitness activities (aerobics, jazzercise, slimnastics, fitness instruction)
- Hot air balloons
- Instruction in any activity listed under "Adventure Trips"
- Martial arts instruction
- Sky diving, air shows, aerial demonstration

For the above listed activities, a Contract is required as specified in Practice 4-10.

SECTION 5.01 Aerial Personnel Lifts

The Commission has implemented this Directive for the use of aerial personnel lifts and complies with Title 29 Code of Federal Regulations (CFR) §1910.67, Vehicle-Mounted Elevating and Rotating Work Platforms; §1926.453, Aerial Lifts, and American National Standards Institute (ANSI) 107-1999.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of aerial personnel lifts.

APPLICABILITY

The Directive applies to all Commission employees required to use aerial personnel lifts to perform their assigned work duties.

DEFINITIONS

For the purpose of the Directive, the following definitions shall apply:

Aerial personnel lift means any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel. These include extendible boom platforms, aerial ladders, articulating boom platforms, and vertical towers.

Articulating boom platform means aerial personnel lift with two or more hinged boom sections.

Authorized Operators refers to an employee who has the education, training and certification to operate aerial personnel lifts.

Boom is a metal section or strut, pivoted or hinged at the heel (lower end) at a location fixed in height on a frame or mast or vertical member, and with its point (upper end) supported by chains, ropes, or rods to the upper end of the frame, mast or vertical member.

Dielectric is nonconductive of electrical current.

Extension boom platform means an aerial personnel lift (except ladders) with a telescopic or extension boom. Telescopic derricks with personnel platform attachments shall be considered to be an extension boom platform when used with a personnel platform.

Insulated aerial device means aerial personnel lift designed for work on energized lines and apparatus.

Platform means any personnel-carrying device (i.e. basket or bucket) that is a component of an aerial personnel lift.

Vertical Tower means aerial personnel lift designed to elevate a platform in a substantially vertical axis.

RESPONSIBILITIES

Supervisors

1. Ensuring employees under their supervision comply with the procedures outlined in this Directive.
2. Ensuring employees receive adequate training.

Employees

1. Follow all safety procedures as outlined in this Directive.
2. Understand and follow the Safety and User's Manual for the aerial personnel lift(s) they operate.
3. Attend all required training programs.

Risk Management and Safety Office

1. Develop and maintain the written training programs.
2. Conduct aerial personnel lift safety-training programs.
3. Evaluate the overall effectiveness of the Directive on a periodic basis.

REQUIREMENTS

General

All aerial personnel lifts shall be inspected by the operator before the initial use. Supervisors shall ensure all defects and damage are repaired or the vehicle shall be taken out of service until the necessary repairs have been made.

Each employee operator shall have a valid operator's license for the class of vehicle being operated.

Only trained employees who have been designated by their supervisor are authorized to operate aerial personnel lifts.

Only a crew of two or more trained employees shall operate aerial personnel lifts. One employee is responsible for staying on the ground and operating the lift in case of an emergency.

Employees shall follow the manufacturers instructions for the safe operation of the aerial lift.

A copy of the User's Manual (provided by the manufacturer) shall be kept in the vehicle at all times as a required guide. The manual shall be placed in the compartment closest to the base controls for the aerial platform.

Employees shall not belt-off or tie-off to any adjacent pole, structure, or equipment while working from an aerial lift.

Employees shall not wear pole climbers while performing work from an aerial personnel lift.

Lift controls shall be tested prior to use to determine that such controls are in safe working condition.

Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

When operating an aerial lift, the operator shall look in the direction of travel of the bucket. The operators shall stay aware of the booms in relation to all other objects and hazards.

When these lifts are operated over road, the clearances from passing vehicles shall be maintained or traffic control shall be provided. (See cone placement diagram).

Employees shall not be permitted to use an aerial personnel lift as a means of access. In the event that there are no other means of access, specific procedures including rationale (feasibly), duration, evacuation, fall protection, etc. shall be developed and reviewed with affected employees prior to implementation.

Large or excessive amounts of material, excluding tools, shall not be transported in an aerial personnel lift. Other material lifts would be necessary for such activities.

Load limits specified by the manufacturer shall not be exceeded.

An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment that is specifically designed for this type of operation.

Wheel chocks shall be set in place before using an aerial lift, unless the lift has no wheels on the ground.

All hoses affecting the dielectric characteristics of equipment shall meet the manufacturer's specifications.

Except for scissor-lifts, aerial personnel lifts that can operate horizontally shall have the brakes set and the outriggers fully extended, when used, be positioned on pads or a solid surface, and have wheel chocks in place before use on an incline.

Dielectric inspections and load capacity tests shall be conducted on an annual basis according to manufacturers specifications.

REQUIRED EQUIPMENT for AERIAL PLATFORM TRUCKS

All aerial personnel lift vehicles shall have the following equipment and materials on board at all times:

- User's Manual
- Chock blocks (2)
- Fire Extinguisher (1) (10lb. ABC)
- Traffic cones with reflective stripes (7)
- First Aid Kit (1)
- Full Body Harness (1)
- Lanyard (1) > 2' in length

ADDITIONAL SAFETY EQUIPMENT

Portable Radios:

1. Operators shall carry a portable radio for emergency situations if they are operating the bucket alone.
2. Direct connect shall be made with a supervisor or the appropriate Police Department if the operator is working off hours.

TRAINING

Only trained and authorized employees are permitted to operate aerial personnel lifts.

A Certified aerial personnel lift trainer shall conduct training for employees of the Commission.

Operators shall be instructed in the safe and proper operation of the aerial personnel lifts using the manufacturer's owner's manual.

BOOM and LADDER LIFT UNITS

Before ladder trucks and tower trucks are moved from site to site the aerial ladders shall be secured in the lower traveling position by the locking device above the truck cab, and the manually operated device at the base of the ladder, or by other equally effective means (e.g., cradles which prevent rotation of the ladder in combination with positive acting linear actuators).

An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment that is specifically designed for this type of operation.

Articulating boom and extendible boom platforms, primarily designed as personnel carriers, shall have both platform upper and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

Insulated aerial devices shall not be altered in any manner that might reduce its insulating value. The insulated boom of a lift shall be regularly maintained and certified to ensure the contained insulating properties.

Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and the outriggers are in the stowed position.

DAILY SAFETY CHECK

1. The operator of the aerial personnel lift shall conduct a safety check/inspection prior to vehicle use to determine hazards and identify damage.
2. Utilize the attached safety checklist (See Appendix C).
3. Keep the completed safety checklist on the lift during the work operations by the operator who completed the checklist.
4. A new checklist shall be completed anytime there is a change in operators and/or change in jobs.

FALL PROTECTION

The use of fall protection equipment is required when the operator enters the bucket and begins to elevate, regardless of height.

The minimum level of fall protection for the bucket truck is a full body harness and lanyard, which shall be 2' in length.

Attachment points for bucket trucks shall be capable of withstanding 5,000 pounds of force and shall be maintained where designated by the manufacturer.

Additional fall protection and safety requirements:

1. Employees shall not place any item into the bucket for the purpose of increasing work height.
2. When using the articulating boom on a permitted incline, the bucket shall be located on the upgrade side and in a stable position.
3. Hard hats are required for all bucket truck operators.

WORK SITE SAFETY

1. Prior to starting the vehicle the operator shall conduct a walk-around of the vehicle to verify safe operation.
2. Identify the most level grade from which to operate the vehicle.
 - The slope should not exceed 5° (degrees).
 - If the operation of the bucket must be performed on an incline > 5° (degrees), then the bucket shall only be used on the high side of the vehicle.
3. Whenever possible the operator shall use a "spotter" to assist them in backing-up the vehicle.
4. Set the Emergency Brake.
 - The aerial platform will not operate until the brake has been engaged.
5. Position both wheel chocks.
 - Place on both sides of the rear tires.
6. Engage power source.
7. Set barricades and cones around the vehicle (see Appendix B).
8. Verify portable radio operation (if applicable).
9. The operator and or supervisor shall discuss work with employees on the ground.
 - Advise employees of all hazards and the risk of injury from falling objects.
10. Put on all required fall protection equipment.
11. Maintain proper distance from electrical power lines (See Appendix A).
12. **Do not** operate the articulating aerial boom if:
 - Wind gusts exceed 30mph.
 - There is a possibility of an electrical storm.
13. Verify that the area under and around the work site is free of passers-by.
14. Check out overhead clearances.
 - Building design, fixtures and set-up
 - Equipment
 - Lights
 - Sprinkler heads and tree limbs

WORK ZONE SAFETY and TRAFFIC CONTROL

Operators are responsible for ensuring traffic safety anytime the lifts are used on paved surfaces accessible by motor vehicles, bicycles and foot traffic

Before going to the work site a traffic control plan should be developed. The control plan addresses the need for traffic control devices and personal protective equipment for the employees working on the site.

Maintenance work that takes place either on or near the roadway creates a potentially hazardous situation, which shall require the use of traffic controls.

All necessary traffic control devices shall be installed before maintenance work begins and must be maintained during the entire work period.

Traffic control devices (signs, barricades and cones) provide drivers with sufficient advanced warning, provide proper protection for the motorists and our employees, and advise the motorists of the travel path.

Only the necessary vehicles should park at the site. Those vehicles should be parked in areas that provide safe entrance and exit to and from the site. The vehicles should not create potential conflicts with other vehicles/equipment operating in the work area.

All vehicles/equipment in work area should be parked on the same side of the road.

All employees should work facing traffic. If this is not practical then a lookout should be provided. Employees should be alert of the job site hazards and should identify the appropriate escape routes.

All traffic control devices should be removed in a timely manner and in a manner that provides employees the most protection.

Avoid working during peak hours on high volume traffic routes.

Safety Vests

Safety Vests shall be provided for all employees who are responsible for traffic safety and cone placement. The safety vests shall meet the ANSI/ISEA 107-1999 Standard. The standard requires that safety vests be provided to employees working in or close to roadways.

Safety Vests fall into the following Classes:

Class I

Garments for workers who have ample separation from vehicular traffic that does not exceed 25 mph. Class I garments are typically safety vests and are recommended for workers in warehouses with equipment traffic, sidewalk maintenance workers and delivery vehicle drivers.

Class II

Garments intended for users who need greater visibility in poor weather conditions and whose activities occur near roadways where traffic speeds are between 25 mph and 50 mph. This class of garment is suitable for most tree crew operations (keeping in mind the speed limit of the roadway).

Class III

Garments providing the highest level of visibility to workers in high-risk environments that involve high task loads, a wide range of weather conditions and traffic exceeding 50 mph. Class III garments, which provide coverage to the arms and/or legs as well as the torso include pants, jackets, coveralls or rain wear. These garments are recommended for all roadway crews, vehicle operators (mowing operations), utility workers, survey crews, emergency responders, and accident site investigators.

ANSI 107-99 Safety Vest Standards

Requirement	Class III garments	Class II garments	Class I garments
Background material	1240 in ² (0.80 m ²)	775 in ² (0.50 m ²)	217 in ² (0.14 m ²)
Reflective material	310 in ² (0.20 m ²)	201 in ² (0.13 m ²)	155 in ² (0.10 m ²)
Photometric performance	Level 2	Level 2	Level 2
Combined performance	N/A	N/A	310

CONE PLACEMENT

When Parked:

1. Place a cone at the rear of the vehicle when the truck will be backed up or out of a parking spot.
2. Place a cone at the front of the vehicle when the truck will be driven forward.

When on a roadway work site:

1. A minimum of 4 cones shall be placed behind and 3 cones in front of the bucket truck when use in the street is required.
2. A distance of ten (10) feet must separate each cone.

See Appendix B – Cone Placement Diagram.

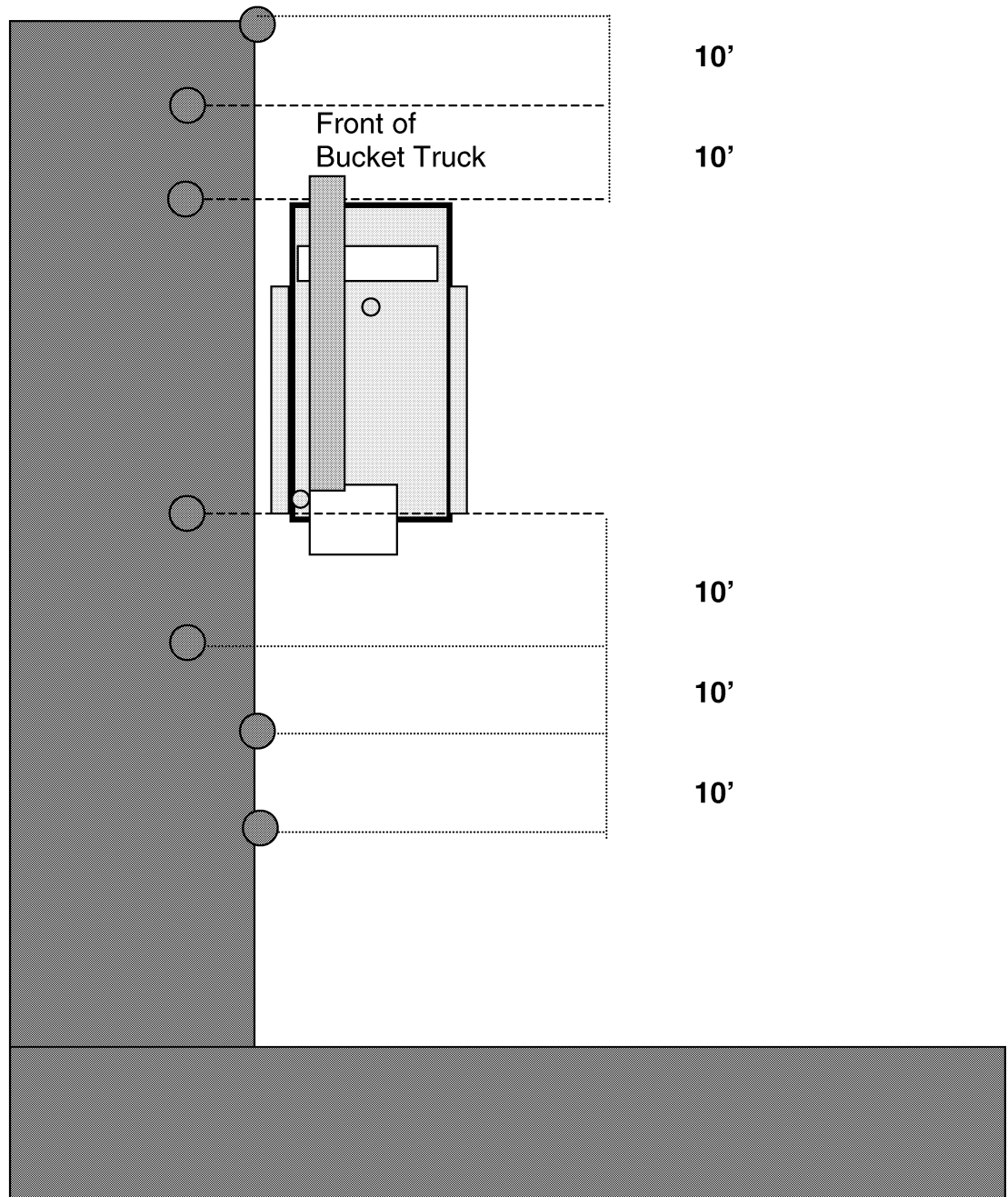
Appendices:

- Appendix A – Minimum Approach Distances
- Appendix B – Cone Placement Diagram
- Appendix C – Aerial Personnel Lift Safety Checklist

Appendix A – Minimum Approach Distances

Voltage to Ground	Minimum Approach Distance
50 kV or less	10 feet
Over 50 kV	10 feet + 4 inches for every 10 kV over 50 kV

Appendix B – Cone Placement Diagram



Appendix C – Aerial Personnel Lift Safety Checklist

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office.
Aerial Personnel Lift Inspection Form

AERIAL PERSONNEL LIFT SAFETY CHECKLIST (Prior to use)	OK	NOT OK	Comments
Fuel Odor Present (DO NOT START TRUCK - Report to Supervisor Immediately)			
Fuel Level - Fuel Leaks			
Tires - Condition and Pressure			
Motor oil, power steering fluid, transmission fluid			
Coolant level, hoses			
Belt tension			
Batteries			
Windshield washer fluid			
Safety Devices – Back-up alarm, flashing light (beacon)			
Horn			
Lights			
Steering			
Meters, gauges and controls			
Brakes and brake lights			
Parking brake			
Mirrors			
Wiper blades, controls and washer fluid			
Heater			
Seats and seat belts			
Head, tail and direction lights			
Cab, body, glass			
Warning lights			
Reflectors			
Coupling devices			
Hydraulic lines and reservoirs			
Bucket/platform			
Body harness and lanyard			
Boom and securing device			
Outriggers and pads			
Springs – steering mechanism			
Drive line, universal joints			
Drain air reservoirs			
Exhaust system			
Engine			
Fire extinguisher			
Emergency triangles			
First aid kit			
Other items deficiencies noted:			
Operator Signature:	Date:		

SECTION 5.02 Bloodborne Pathogens

The Commission has implemented this Directive to comply with Title 29 Code of Federal Regulations (CFR) §1910.1030, Bloodborne Pathogens; §1910.1020, Access to Employee Exposure and Medical Records; and 29 CFR §1904 Recordkeeping.

PURPOSE

The purpose of this Directive is to define the procedures and standards that protect employees from occupational exposure to bloodborne pathogens and certain other potentially infectious materials.

APPLICABILITY

This Directive covers various requirements for Department Heads, employees and volunteers with respect to bloodborne pathogens.

POLICY

All employees of the Commission who have been identified as having a predetermined risk of occupational exposure to bloodborne pathogens shall be provided with the appropriate procedural precautions and training.

DEFINITIONS

Approved Disinfectant means a bleach/water solution in a ratio of 1:10 or any commercially available disinfectant such as Betacide or Madacide.

Blood means human blood, human blood components and products made from human blood.

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B virus (HBV) and Human Immunodeficiency Virus (HIV).

Contaminated means the presence of or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Decontamination means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

Engineering Controls means any controls that isolate or remove the bloodborne pathogen hazard from the workplace.

Exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin, or contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

First Responder means any employee who has received accredited training in first aid and cardiopulmonary resuscitation (CPR) and has been designated as a person responsible for rendering immediate first aid assistance to persons who require emergency assistance while on Commission property. (example: Park Police)

Hand-washing Facilities means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV stands for Hepatitis B Virus

HIV stands for Human Immunodeficiency Virus.

Licensed Healthcare Professional means a person whose legally permitted scope of practice allows him or her to independently perform the activities required to provide the Hepatitis B vaccinations and conduct the post-exposure evaluations and follow-ups.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane, or contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Other Potentially Infectious Materials (OPIM) means:

The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between bodily fluids; and

Any unfixed tissue or organ (other than intact skin) from a human (living or dead)

Responsible Person (Personnel) means any person or persons trained in the control of disinfection procedures and disposal procedures of equipment, product or materials suspected to be contaminated with bloodborne pathogens. (example: custodians)

Source Individual means any individual, living or dead, whose blood or other potentially infectious materials may be source of occupational exposure to the employee.

Universal Precautions means an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens.

Work Practice Controls means controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

REQUIREMENTS

Exposure Determination

The Risk Management and Safety Office shall assess job responsibilities that involve potential occupational exposure to bloodborne pathogens or OPIM. A list of positions, which have been identified as having potential exposure shall be compiled and retained. Exposure determination shall be based on the definition of occupational exposure without regard to personal protective equipment.

Classifications with Possible Occupational Exposure

As of this date of issuance of these guidelines the following classifications have been identified as having potential exposure.

Appendix A includes classifications in which all or some employees have occupational exposure. These job classifications shall be listed, although it is not necessary to list the specific work tasks of the people contained in this group.

Employees assigned to these classifications in Appendix A could be exposed to blood and bloodborne pathogens as result of providing immediate first aid assistance, or due to decontamination of contaminated equipment and/or surfaces.

Appendix B includes classifications in which some employees may have occupational exposure. These job classifications shall be listed, although it is not necessary to list the specific work tasks of the people contained in this group.

Exposure Prevention and Control

Universal Precautions

First Responders are trained employees who are designated persons responsible for rendering first aid assistance, however, all employees shall adhere to the universal precautions method, that is, all human blood and other potentially infectious materials (OPIM) shall be treated as infectious for HIV, HBV (Hepatitis B Virus), HCV (Hepatitis C Virus) or other bloodborne pathogens. Where differentiation of types of bodily fluids is difficult or impossible, all body fluids are to be considered potentially infectious and the appropriate personal protective equipment shall be utilized.

Engineering Controls and Work Practice Controls

Engineering controls and work practice controls are to be the primary methods used to prevent occupational transmission of HBV and HIV.

Engineering controls reduce employee exposure at the work site by either removing or isolating the hazard or isolating the employees from exposure. Engineering controls shall be examined and maintained or replaced on a scheduled basis. Proper work practice controls change the manner in which a task is performed.

PERSONAL PROTECTIVE EQUIPMENT

If occupational exposures remain after instituting engineering and work practice controls, personal protective equipment (PPE) shall be used. PPE is considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach employees' work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of the time that the PPE shall be used.

Personal Protective Equipment (PPE) is specialized clothing or equipment worn by employees for protection from exposure to blood or other potentially infectious materials (OPIM). PPE may be used to prevent employee exposure to sharp objects, which pose the potential exposure to bloodborne pathogens.

PPE shall be provided at no cost to employees and used according to the type of exposure anticipated. To insure that PPE is used properly the Commission shall:

- Make personal protective equipment readily available to affected employees.
- Train employees in the proper use, inspection, cleaning, and storage of their PPE.
- Provide appropriate PPE for the nature of the tasks being performed.
- Ensure that various sizes of PPE are available for proper fit.

Types of PPE include: face shields, eye protection, gloves, gowns, masks, mouthpieces and CPR shields/masks. If the PPE is re-useable, it shall be repaired, replaced and/or cleaned when necessary.

First Responders and Responsible Personnel shall have an Infection Protection Kit in their possession. Contents of an Infection Protection Kit should include the following items:

- Antiseptic Towelettes
- Rubber latex gloves
- Hypoallergenic gloves (for those allergic to regular gloves)
- Face mask
- Disposable body gown and shoe covers
- Protective eyewear
- Biohazard bag with secure tie
- Area Control Biohazard warning type and signs

Disposable PPE shall not be re-used. If circumstances require the use of this equipment, it shall be properly disposed of after its use in the designated leak-proof container.

First Responders (e.g. Park Police) certified in CPR shall be provided with plastic mouth shields with a one-way valve to protect a first responders' mouth area while performing artificial respiration or cardiopulmonary resuscitation (CPR).

HOUSEKEEPING

Surfaces

Any surface that has been exposed to potentially infectious materials shall be decontaminated.

The Commission shall ensure that work sites surfaces are maintained in a clean and sanitary condition.

- A written cleaning schedule shall be established and maintained for each work site.
- All equipment and working surface that could have been contaminated with blood or other infectious materials shall be cleaned and disinfected using a solution of bleach and water mixed at a 1:10 ratio (1 part bleach to 10 parts water).
- The methods for cleaning shall be based on the type of surface to be cleaned, type of soil present, and the tasks and procedures performed.

Refuse Handling

- All bins, pails, cans and re-useable receptacles must be disinfected on a regularly scheduled basis.
- Contaminated broken glassware shall be cleaned up using mechanical means such as tongs or dustpan and brush rather than picked up with the hands.
- Trash in plastic bags shall be handled with caution and never compacted with a bare or gloved hand. Use a mechanical means to compact the trash.
- Trash bags should be held away from the body to avoid the potential of sharp objects penetrating the bag and cutting or sticking the employee.

VACCINATIONS

Post-exposure (Any exposed employee):

All employees are eligible to receive the Hepatitis B vaccination series as part of post-exposure procedures if they are exposed to blood or other potentially infectious materials.

Affected employees shall immediately notify their supervisor if they have been exposed. The employee's supervisor shall ensure steps outlined in Post Exposure Guidelines are followed.

Pre-exposure: (All employees identified with having occupational exposure)

Hepatitis B vaccinations shall be made available after the employee has received the training required bloodborne pathogen training and within ten (10) working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete Hepatitis B vaccination series, or that antibody testing has revealed that they are immune or that the vaccine is not recommended because of medical reasons are not required to receive the vaccinations.

The Hepatitis B vaccinations shall be provided at no cost, at a reasonable time and place, and under the supervision of a licensed physician/licensed healthcare professional, and according to the latest recommendations of the U.S. Public Health Service.

All employees identified as having occupational exposure (see Appendix A), shall be immediately eligible to be prescreened for the presence of Hepatitis B virus antibodies and to receive a Hepatitis B Vaccine at no cost to the employee within ten (10) working days of their designation as a First Responder or Responsible Person. Employees shall sign the *Hepatitis B Declination Form* if they choose not to be vaccinated; however, they may later opt to receive the vaccine series at no cost.

The Commission shall provide employees with a copy of the medical provider's written report within fifteen (15) working days of receipt of the report.

If the U.S. Public Health Service recommends a routine dose(s) of Hepatitis B vaccine at a future date, such booster dose(s) shall be made available at no cost to the employees.

Vaccination Schedule

First Shot – After receiving the required bloodborne pathogen training and within ten (10) days of the initial assignment.

Second Shot – Thirty (30) days after the initial vaccination

Third Shot – Six (6) months after the second shot

If an employee chooses to stop receiving the vaccinations or misses a vaccination they become inactive in the program. They can resume the vaccination series if the risk of exposure to blood or other potentially infectious materials exists in their present job classification. If the bloodborne

pathogen exposure exists then the vaccination series will resume where they left off. The vaccination series will continue at no cost to the employee.

EXPOSURE INCIDENTS

An exposure incident may occur if an employee comes into contact with the blood of another person or some other potentially infectious material. If any exposure incident occurs, the employee's supervisor shall ensure that the area and/or equipment that has been contaminated by blood or other potentially infectious materials is secured from inadvertent exposure to others by placing biohazard warning tape and biohazard signs around the contaminated area. The signs and tape shall not be removed until the area is thoroughly cleaned and disinfected with the bleach disinfectant solution by a Responsible Person wearing the appropriate Personal Protective Equipment.

Post Exposure Guidelines

When any employee is subject to an exposure incident, regardless of whether or not that employee is a designated First Responder or Responsible Person the following Post Exposure Guidelines shall be followed:

- The employee shall notify their supervisor immediately of the exposure.
- The Supervisor shall immediately refer that employee to the designated medical provider.
- The Supervisor shall file the workers' compensation first report of injury.
- The Supervisor shall document the exposure incident and forward that report to the Risk Management and Safety Office.

The Supervisor shall ensure that the employee receives a confidential post-exposure medical evaluation and follow-up. The employee is eligible to receive the Hepatitis B vaccination series as part of this post-exposure program. Should the employee decline the vaccination;

- She/he shall sign the Hepatitis B Declination Form to document his/her decision.
- The Risk Management and Safety Office shall provide the designated medical provider with a copy of the completed incident report as soon as possible following the investigation of the exposure incident.
- A request is made to the source individual that they voluntarily submit to serological blood test to screen for the presence of Hepatitis B (HBV) and Human Immunodeficiency (HIV) virus antibodies. If the source individual agrees to be tested, the person shall be directed to the designated medical provider. Document this request on the Blood Testing Consent/Non-Consent Form.
- A case number or personal identification number may be used for all laboratory reports to ensure confidentiality.
- The serological test results will be forwarded to the crisis intervention consultant or the Employee Assistance Program. This will maintain confidentiality and ensure that accurate information is provided to the employee.

- Subsequent testing will be performed if necessary.

If the source individual declines a blood test to determine the presence of Human Immunodeficiency (HIV) Virus antibodies, but does give consent for a blood test to determine the presence of Hepatitis (HBV) antibodies, the medical provider shall be instructed to retain the source individual's blood sample for a period on ninety (90) days following the date the source individual's blood was drawn. The source individual may elect to have a blood test to detect HIV antibodies at a later date, in which case the medical provider can use the original sample provided by the source individual.

The following information shall be provided to the licensed physician/licensed healthcare professional who conducts the post-exposure evaluation and follow-up:

- A copy of the OSHA Bloodborne Pathogen standard, 29 CFR 1910.1030
- A description of the employee's duties and responsibilities as they relate to the exposure
- A copy of the Blood and Bodily Fluid Exposure Report which provides the documentation on the routes of entry and circumstances of the exposure
- The results of source individual's blood testing, if available
- All other relevant medical records including the employee's Hepatitis B vaccination series status

All post-exposure evaluation, follow-up and laboratory tests conducted shall be available, in confidence, to each employee who has had an exposure incident. The evaluations and test shall be conducted by an accredited laboratory and provided at no cost to the employee. Follow-up shall include a confidential medical evaluation documenting the following information:

- Circumstance of the exposure
- Identifying and testing the source individual, if feasible
- Testing the exposed employee's blood if he/she consents
- Post-exposure prophylaxis
- Counseling and evaluation of reported illness

The Risk Management and Safety Office shall obtain a copy of the evaluating healthcare professional's written opinion and provide it to the exposed employee within fifteen (15) days of the completion of the evaluation.

CONTAMINATED MATERIALS and LABELING

Any disposable contaminated materials shall be discarded by sealing them within a plastic bag, which is then to be sealed in a red bag or one that is marked with a biohazard symbol. The proper disposal of these items shall occur by coordinating with a local waste disposal company.

Laundry

All laundry contaminated with blood or other potentially infectious materials shall be handled as little as possible and shall be bagged or containerized at the location where it was used. The

contaminated laundry shall be placed and transported in bags or containers labeled or color-coded and handled using Universal Precautions.

If the contaminated laundry is wet and likely to soak-through or leak from a bag or container it shall be placed and transported in bags or containers which prevent soak-through and/or leakage of the fluids.

Employees who contact or handle contaminated laundry shall wear protective gloves and any other appropriate personal protective equipment.

TRAINING and RECORDKEEPING

Employees who have been identified by the Risk Management and Safety Office in Group A or B as to having exposure to bloodborne pathogens shall be provided educational training. Qualified trainers who are knowledgeable on the subject of bloodborne pathogens shall conduct the training. The training shall be provided at the appropriate levels of literacy and language to ensure understanding for all the employees.

Bloodborne pathogen training shall be held within thirty (30) days of the effective date of hire, initially upon work site assignment, when there are changes or modification of tasks or new procedures that affect the employee's occupational exposure, and annually for all applicable employees.

The Bloodborne Pathogen Training Program will include the following:

- A copy of the OSHA Standard, with a brief explanation of the contents, and where it may be read and reviewed by the employees
- A copy of this Bloodborne Pathogens Directive
- General explanation of the epidemiology and symptoms of bloodborne pathogens
- An explanation of the methods for recognizing tasks and activities that may involve exposure to potentially infectious material
- An explanation of the modes of transmission of bloodborne pathogens
- An explanation of the exposure control plan and a copy provided to each employee receiving training
- An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices and personal protective equipment
- Information on the types, use, location, removal, handling, decontamination, and disposal of personal protective equipment
- An explanation for the basis of personal protective equipment selection
- Information on the Hepatitis B vaccination, efficacy benefits and that the vaccination is available at no cost to employees
- Emergency procedures when there has been a potential exposure to blood or other contaminated material
- How to report an exposure incident and medical follow-up
- Post exposure evaluation and follow-up provided and
- An explanation of biohazard label and color-coding for hazardous materials

Training records shall be maintained and kept for three (3) years from the date of the training. Other documentation of this training is acceptable when multiple topics are covered. The following information shall be included with the documentation:

- The dates of the training sessions
- An outline describing the material presented
- The names and qualifications of the persons conducting the training

- The names and job titles of all persons attending the training sessions
- Training records shall be available to employees or employee representatives upon request

Exposure and medical records shall be maintained for thirty (30) years past the exposed employee's last day of employment, as follows:

- The name and social security number of the employee
- A copy of the employees HBV vaccination status, including the dates of vaccination
- A copy of all results of examinations, medical testing, and follow-up procedures
- The employer's copy of the healthcare professional's written opinion
- A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and the circumstances of the exposure

Medical records shall be kept confidential and maintained for the duration of employment plus 30 years.

The medical and training records will be made available upon request to the Director of the National Institute for Occupational Safety and Health (NIOSH) and to the Assistant Secretary of Labor for Occupational Safety and Health (OSHA).

The Risk Management and Safety Office shall provide to any employee who requests a copy of the Bloodborne Pathogens Directive within fifteen (15) working days from the date of the employee's request.

A case number or personal identification number may be used for all laboratory reports to insure confidentiality.

The Health and Benefits Office will arrange initial crisis intervention counseling, through contract counselors for the affected employee or the employee may contact the Employee Assistance Program directly.

The serological test results will be forwarded to the crisis intervention consultant or the Employee Assistance Program. This will maintain confidentiality and insure that accurate information is provided to the employee.

Subsequent testing will be performed if warranted.

APPENDICIES

- Appendix A – Bloodborne Exposure Job Classification Form (Employees with exposure)
- Appendix B – Bloodborne Exposure Job Classification Form (Employees may have exposure)
- Appendix C – Bloodborne Pathogen Training Certificate
- Appendix D – Informed Consent for Hepatitis – B
- Appendix E – Hepatitis B Vaccine Declination Form
- Appendix F – Responsible Person's Bloodborne Pathogen Exposure Control Statement
- Appendix G – Blood Testing Consent/Non – Consent Form

Appendix B – Bloodborne Exposure Job Classification Form

**The Maryland National Capital Park and Planning Commission
Bloodborne Exposure Job Classification Form**

Job classifications in which some employees may have occupational exposure due to the nature of their work

Job Classifications	Job Classifications
Aircraft Maintenance Supervisor	Painter
Aircraft Mechanic	Park and Recreation Community Supervisor
Area Recreation Program Manager	Park General Maintenance Leader
Arena General Manager	Park Manager I,II and III
Arts Exhibits Specialist I and II	Park Maintenance Workers
Arts Specialist I and II	Park Naturalist I and II
Bus Operator (Special Populations)	Park Naturalist Technician
Carpenter	Park Police (ALL)
Child Care Aide II and III	Park Police Dispatcher Trainee, I, and II
Child Care/Special Projects Division Manager	Park Police Stable Manager
Child Care Specialist I and II	Park Ranger I, II, III
County Wide Arts Program Coordinator	Park Ranger Supervisor
County Wide Facility Manager I and II	Park and Recreation Community Supervisor
County Wide Sport Specialist I, II and III	Parks Facility Manager
Electrician	Play Equipment Safety Specialist
Enterprise Facility Manager I, II and III	Plumber
Exhibits Technician	Program Facility Aide I, II and III (All Ice Rink Guards)
Exhibits Specialist I and II	Program Facility Manager
Exhibits Shop Supervisor	Radio Operator
Golf Course Maintenance Supervisor I and II	Recreation Center Supervisor I and II
History/Museum Specialist	Recreation/Enterprise Facility Management Technician
Senior History Specialist/Museum Manager I	Recreation/Enterprise Facility Manager I, II and III
History Coordinator/Museum Manager II	Recreation Specialist I, II and III
HVACR Mechanic	Regional Operations Manager
HVAC Supervisor	Safety Specialist I and II
Land Survey Aide I and II	Senior Carpenter
Land Survey Supervisor	Senior Electrician
Lead Carpenter	Senior HVACR Mechanic
Lead Electrician	Senior Mason
Lead HVACR Mechanic	Senior Mechanic
Lead Mason	Senior Painter
Lead Mechanic	Senior Plumber
Lead Painter	Senior Welder
Lead Plumber	Therapeutic Recreation Coordinator
Lead Welder	Therapeutic Recreation Specialist I, II, and III
Life Guards (ALL)	Trade Shop Supervisor I and II
Mason	Tree Climber I and II
Mechanic	Tree Maintenance Supervisor
Nature Facility/Program Manager	Welder

Appendix C:

**The Maryland National Capital Park and Planning Commission
Bloodborne Pathogen Training Certificate**

FOR EMPLOYEE TO COMPLETE

I have received Bloodborne Pathogen Training as described in The Maryland National Capital Park and Planning Commission's Bloodborne Pathogens Exposure Control Program. The training was conducted on _____ (date).

--	--

Employee Name (Print)

Employee Name (Signature)

--

Job Classification

--	--

Department /Work Area/ Facility

Facility (Director/Manager)

Montgomery County

Prince George's County

Career Employee

Seasonal Employee

INSTRUCTOR' (S) TO COMPLETE

I certify that the above named employee has been provided with Bloodborne Pathogen Training on _____ (date).

#1
#2

Instructor's Name(s) (Print)

#1
#2

Instructor's Signature(s)

RISK MANAGEMENT AND SAFETY OFFICE USE ONLY

Exposure Determination

Required by Job Classification: First Aid/ CPR
Other: _____

Yes No

Hepatitis B Shots Offered

Yes No

Completed Vaccination Acceptance/Declination Form
Received by Risk Management and Safety Office

Yes No

Vaccination Series Completed

Yes No

RETURN TO RISK MANAGEMENT AND SAFETY OFFICE



Informed Consent for Hepatitis B Vaccine

I have read the attached statement about Hepatitis B and the Hepatitis B Vaccine. I understand the benefits and risks of the vaccine. I realize that I must have three doses of the vaccine to assure maximum protection, and compliance with the immunization schedule is my responsibility. I acknowledge that there is no guarantee that I will become immune or that I will not experience adverse side effects from the vaccine.

Note: All minor employees, under the age of 18, must have a parent or legal guardian sign below.

Print Employee Name:		Employee ID #	
Employee Signature:		Date:	
Parent/Legal Guardian Signature:		Date:	
Job Title:		Job Code Number:	
Employee Status:	<input type="checkbox"/> Career <input type="checkbox"/> Seasonal <input type="checkbox"/> Other: _____		
Work Location:		County:	<input type="checkbox"/> Montgomery <input type="checkbox"/> Prince George's
Instructor/Supervisor:	_____ Print	_____ Sign	Date:

This section to be completed by the Medical Provider

VACCINATION DATE	LOT NUMBER	MEDICAL PROVIDER
1.		
2.		
3.		

RETURN TO RISK MANAGEMENT AND SAFETY OFFICE

Appendix E:

The Maryland - National Capital Park and Planning Commission

Hepatitis B Vaccine Declination Form

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring the Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with the Hepatitis B vaccination at no charge to myself.

I decline take the Hepatitis B vaccination series at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future I continue to have occupational exposure to blood and other potentially infectious materials and I want to be vaccinated with the Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Note: All minor employees, under the age of 18, must have a parent or legal guardian sign below.

Print Employee Name:		Employee ID #	
Employee Signature:		Date:	
Parent/Legal Guardian Signature:		Date:	
Job Title:		Job Code Number:	
Employee Status:	<input type="checkbox"/> Career <input type="checkbox"/> Seasonal <input type="checkbox"/> Other: _____		
Work Location:		County:	<input type="checkbox"/> Montgomery <input type="checkbox"/> Prince George's
Instructor/ Supervisor:	_____ Print	_____ Sign	Date:

RETURN TO RISK MANAGEMENT AND SAFETY OFFICE

Appendix F:

The Maryland - National Capital Park and Planning Commission

Responsible Person's Bloodborne Pathogen Exposure Control Statement

Name:		SSN:	
Division/Department:		Job Title:	

As a designated Responsible Person, I understand that in the course of work I may be requested to decontaminate equipment or facilities, or control materials contaminated with blood or other bodily fluids, which could carry pathogens capable of causing diseases including, but not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV). I have received training on control measures and have received and read the Commission's Bloodborne Exposure Control Program.

I will do anything conceivably possible to protect myself and my fellow employees from potential exposures to bloodborne pathogens.

Signature:		Date:	
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RETURN TO RISK MANAGEMENT AND SAFETY OFFICE

Appendix G:

The Maryland - National Capital Park and Planning Commission

Blood Testing Consent/Non-Consent Form

Date of Exposure Incident:	
Hepatitis B Vaccination Status:	<input type="checkbox"/> Series complete <input type="checkbox"/> In process <input type="checkbox"/> Has not been vaccinated

I, _____, consent to being tested, as indicated below, for HIV and or HBV. I understand that the results of this testing will be kept confidential and will be used to determine the appropriate treatment for the individual exposed to my blood or bodily fluid.

Consent is given to be tested for:				
HIV (Human Immunodeficiency Virus)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
HBV (Hepatitis B Virus)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

Employee Name	Employee ID#	Date

I, _____, do not consent to any blood testing. The circumstances for the request to do so have been explained to me and I have no further questions or comments that need to be addressed as I make this decision. I understand that this denial will be kept confidential.

Employee Name	Employee ID#	Date

RETURN TO RISK MANAGEMENT AND SAFETY OFFICE

SECTION 5.03 Confined Space Entry

The Commission has implemented this Directive for the entry into confined spaces and complies with Title 29 Code of Federal Regulations (CFR) §1910.146, Permit Required Confined Spaces.

PURPOSE

The purpose of this Directive is to define the procedures and standards for the safe entry into confined spaces and permit-required confined spaces.

APPLICABILITY

This Directive applies to all Commission employees required to enter confined spaces to perform their assigned duties.

POLICY

All Commission employees involved in confined space entry program shall follow the procedures outlined in this Directive for safe entry and work in confined spaces.

PROGRAM OVERSIGHT

This Directive is intended to provide requirements for safe work practices in confined spaces. Compliance with this Directive is required for all Commission employees. The Risk Management and Safety Office, along with departmental supervisors, will be responsible for ensuring Commission employees comply with the requirements of this Directive. A thorough review of this Directive is conducted on an annual basis and modifications are incorporated as necessary.

DEFINITIONS

Confined Space is defined as:

- Large enough and so configured that an employee can bodily enter and perform their assigned work;
- Has limited or restricted means for entry and exit; and
- Is not designed for continuous employee occupancy.

Permit-Required Confined Space is one that meets the definition for a Confined Space and has one or more of the following characteristics:

- Contains or has potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or by a floor which slopes downward and tapers to a smaller cross section; or,
- Contains any other recognized serious safety or health hazard.

An **alternate procedures space** is a permit-required confined space in which the only hazard is atmospheric and where continuous forced air ventilation alone will maintain safe entry.

Acute Exposures - Exposures, which occur for relatively short periods of time, generally minutes to 1-2 days. Concentrations of toxic air contaminants are high relative to their protection criteria. In addition to

inhalation, airborne substances might directly contact the skin, or liquids and sludge's may be splashed on the skin or into the eyes, leading to toxic effects.

Acceptable Entry Conditions - The conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Atmosphere - Refers to the air within a confined space. It should be clean, breathable air with enough oxygen for personnel to be able to enter the area, work and breathe.

Attendant - An individual stationed outside the permit-required confined space who is trained as required by this program and who monitors the authorized entrants inside the permit-required confined space and performs all attendants' duties assigned in the Confined Space Entry Program.

Authorized Entrant - An employee who is trained as required by this program and is authorized to enter a permit-required confined space.

Blanking or Blinding - Refers to the absolute closure of a pipe, line or duct by fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage behind the plate.

Ceiling Level - The maximum airborne concentration of a toxic agent to which an employee may be exposed for a specified period of time, usually 15 minutes. At no time must the exposure level exceed the ceiling concentration as listed in 29 CFR Part 1910 Sub Part Z.

Combustible Dust - A dust capable of undergoing combustion or burning when subjected to a source of ignition.

Confined Space - Refers to a space that by its construction or design, has limited openings for entry and exit, has poor natural ventilation, is a space which could contain or produce dangerous air contaminants and which is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, storage tanks, process vessels, pits, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults and pipelines.

Contaminant - Any organic or inorganic substance, dust, fume, mist, vapor, or gas, the presence of which in air can be harmful to human beings.

Entry Permit - A written or printed document that is provided by the employer to allow and control entry into a permit space and contains the information required under 29 CFR 1910.146, Permit-Required Confined Spaces.

Entry Supervisor - The person responsible for determining if acceptable entry conditions are present at a permit-required space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry.

Hazardous Atmosphere - An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape from a permit space) injury, or acute illness due to physical or atmospheric and/or environmental conditions.

Hot Work - Any work involving burning, welding, riveting, or similar fire-producing operations, as well as work which produces a source of ignition such as drilling, abrasive blasting and space heating. Permits for Hot Work must be obtained in accordance with Commission's Safety and Health Programs.

Immediately Dangerous to Life or Health (IDLH) - Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects, or that would interfere with an individual's ability to escape unaided from a permit space.

Inerting - Displacement of the atmosphere by a non-reactive gas (such as Nitrogen) to such an extent that the resulting atmosphere is non-combustible. Inerting an atmosphere produces an IDLH oxygen-deficient atmosphere.

Irritant - Any substance that will induce a local inflammatory reaction on immediate, prolonged, or repeated contact with living tissue.

Isolation - A process whereby the confined space is removed from service and completely protected against the inadvertent release of material by the following: blanking off (skillet-type metal blank between flanges), misalignment of sections of all lines and pipes, a double block and bleed system, electrical lock-out of all sources of power, and blocking or disconnecting all mechanical linkages.

Lower Explosive Limit (LEL) - The minimum concentration of a combustible gas or vapor in air (usually expressed in percent by volume at sea level) that will ignite if an ignition source (sufficient ignition energy) is present.

Oxygen Deficiency - Refers to an atmosphere that is lacking sufficient oxygen. An oxygen-deficient atmosphere is one with less than 19.5% Oxygen.

Oxygen-Enriched Atmosphere – Refers to an atmosphere that has too much oxygen. An oxygen-enriched atmosphere is one with greater than 23.5% Oxygen.

Permissible Exposure Limit (PEL) - The maximum eight-Hour, time-weighted average of any airborne contaminant to which an employee may be exposed. At no time must the exposure level exceed the Ceiling concentration for that contaminant as listed in 29 CFR Part 1910 Subpart Z.

For the purpose of this program, The Commission's Permissible Exposure Limits are 50% of either the OSHA Permissible Exposure Limits or ACGIH Threshold Limit Values for a particular contaminant - the lower of the two.

Purging - The method by which gases, vapors or other airborne impurities are displaced from a confined space. For example, an atmosphere may be purged of a hazardous airborne contaminant by forced ventilation, followed by atmospheric or environmental testing to ensure effectiveness.

Qualified Person - A person designated by the employer, in writing, as capable (by education and/or specialized training) of anticipating, recognizing and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person must be capable of specifying necessary control and/or protective action to ensure worker safety.

Respirator (Approved) - A device which has met the requirements of 30 CFR Part 11 and is designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the Bureau of Mines and the National Institute for Occupational Safety and Health, and the Mine Safety and Health Administration (formerly Mining Enforcement and Safety Administration).

CONFINED SPACE HAZARDS

There are numerous hazards associated with confined spaces. These hazards can be divided into two (2) major categories - health hazards and physical hazards. The following details the kinds of hazards potentially present in identified confined spaces at the Commission.

HEALTH HAZARDS

Hazardous atmospheres are a major concern when entering confined spaces. In order for entry to be safe, breathable air must be free from harmful chemicals and have more than 19.5% oxygen (outdoor air should have roughly 21%). If there is not enough oxygen present or if chemicals are present, a hazardous atmosphere may exist. Hazardous atmospheres that may be present within

a confined space can be divided into four (4) categories: flammable and explosive, toxic, irritating and/or corrosive and asphyxiating.

Flammable Atmospheres

The following are examples of flammable atmospheres that could exist in a confined space. There are a number of reasons why the atmosphere in a confined space may become explosive or flammable. The Commission may not have all (or any) of the following types of explosive or flammable atmospheres within the facility's designated confined spaces. However, this information is supplied as reference for continued evaluation of these spaces.

1. Confined spaces that contain chemicals which are explosive or volatile such as Gasoline or diesel fuel, have the potential for these chemicals to give off explosive vapors.
2. A confined space that has an oxygen level above 23.5% makes it an oxygen-enriched atmosphere. In oxygen-enriched atmospheres, the potential for explosion increases when other explosive chemicals are present. This may be caused by chemical reactions involving an oxidizing agent. Oxidizers, by their nature, give off oxygen during chemical reactions.
3. Often when chemicals are stored in tanks, the walls will absorb some of the chemicals. After the tank has been emptied, the chemicals will permeate out of the walls in a process called *desorption*. This desorption may create sufficient vapors in the space to have an explosive atmosphere. Steel tanks, such as gasoline and propane tanks, will often display this desorption trait.
4. Solvents used to remove petroleum sludge in a tank are often explosive. The vapors given off by this product can lead to an explosive atmosphere if not controlled. It is important to ensure that the space is properly ventilated to avoid this problem.
5. When powdered chemicals or grains are loaded or unloaded, high quantities of dust may be generated. If the dust is combustible and uncontrolled, it may cause an explosion. It is essential to use proper loading/unloading measures to reduce the dust levels.
6. Some confined spaces may contain pyrophoric material that will ignite explosive vapor in the presence of air. Therefore, a qualified person should consider the potential for the presence of pyrophorics prior to ventilation.

Potentially explosive atmospheres must be carefully monitored with intrinsically safe instruments. Such instruments do not introduce an ignition source and will not cause an explosion in explosive atmospheres. Before any work is conducted in a confined space, the area must be ventilated. Ventilation must be constant throughout the work process. It is important to provide enough ventilation to work in the space safely and to prevent the outside area from accumulating explosive vapors.

In addition, all ignition sources must be eliminated prior to and during work in these types of atmospheres. Bonding and grounding should be used to eliminate static electricity. All electrical equipment must be grounded to prevent sparking and arcing. Extra care must be used if *hot work* is to occur in the confined space. Only properly trained and experienced personnel will be allowed to perform hot work in confined spaces.

Toxic Atmospheres

Products that are solids, liquids or gases may produce toxic atmospheres. These chemicals, in addition to the chemicals found on soiled rags and clothing, may cause toxic atmospheres to develop in enclosed spaces. Circumstances that may produce a toxic atmosphere are:

1. The product stored in the container is a toxic material.
2. Organic materials such as sewage give off hydrogen sulfide when they decompose. hydrogen sulfide (H₂S) is a colorless gas with an odor of sulfur. H₂S is highly toxic and small quantities can cause severe illness or death.
3. The removal of sludge from tanks is a common practice. Often the sludge is volatile. Volatile means that the product releases vapors readily. The actual process of cleaning out the sludge can cause an increase in volatile vapors in the confined space.
4. Welding or cutting processes give off metal fumes. These metal fumes may be toxic and can build up inside a confined space.
5. Chemicals used in confined spaces will often have their own hazardous characteristics. These characteristics are often magnified in a confined space. The use of these products for cleaning can result in a toxic atmosphere.

Care must be taken to fully identify the contents of a confined space. Additionally, the products to be used in the space must be identified to ensure that they can be safely used. Complete atmospheric testing must be completed prior to entry. Never rely on your sense of smell as the sole detection device of toxic atmospheres. Carbon monoxide, among other gases, is toxic, colorless, and odorless and will not be detected by the human senses.

Irritant (Corrosive) Atmosphere

Irritants are classified into two groups - **primary** and **secondary** irritants. Material Safety Data Sheets of materials should be consulted for irritating or corrosive effects prior to any entry.

1. Primary irritants cause violent surface-irritating effects on skin tissue and the respiratory tract without causing other bodily health effects (systemic toxic effects). Selection of proper personal protective equipment will prevent exposure to these products. Examples of primary irritants are chlorine, sulfuric acid, hydrofluoric acid, ozone, ammonia, sulfur dioxide and nitrogen dioxide.
2. Secondary irritants cause systemic toxic effects as well as surface irritation. These products will cause long-term health effects if personal protective equipment and clothing is not worn. Examples of secondary irritants include carbon tetrachloride, benzene, trichloroethane, trichloroethylene, and ethyl chloride.

Prolonged exposure to irritating atmospheres may cause damage to the respiratory system and other vital organs. Proper selection and use of personal protective clothing will reduce exposure to these products.

Asphyxiating Atmosphere

Oxygen constitutes approximately 21% of normal air. If oxygen levels drop below **19.5%**, the atmosphere is considered to be oxygen-deficient or asphyxiating. In this environment, normal body functions begin to shut down. At an oxygen level of less than 16%, death will occur. The reduction of oxygen within a confined space may be the result of either consumption or displacement.

1. Consumption of oxygen may occur when welding, heating or cutting procedures take place in a confined space. Bacterial action in the decomposition or fermentation of organic matter and the rusting of metal will consume all oxygen present. The breathing process of workers within the confined space may also deplete the oxygen supply. The more people working within a confined space, the faster the oxygen is consumed.

2. Displacement of oxygen by another gas in a confined space may be accomplished naturally or by physically feeding another gas into the space. Displacement of oxygen may take place naturally in sewers, storage bins, wells and tunnels. This displacement is caused by the presence of other gases like hydrogen sulfide and carbon monoxide.

Gases such as nitrogen, argon and helium are sometimes used as inerting gases. An inert gas is used to displace an explosive atmosphere with a non-explosive atmosphere. Extreme care must be followed when using these "non-toxic", colorless and odorless gases. Gases with these properties are very dangerous asphyxiates and monitoring of the oxygen (O₂) content of a confined space must be conducted continuously when they are in use.

PHYSICAL DANGERS

The physical dangers within a confined space range from hazards associated with equipment within the space to physiological health hazards from heat and noise. The following section describes some of the hazards associated with working within a typical confined space.

Mechanical Hazards

Mechanical and electrical equipment are the cause of numerous injuries in confined spaces. All electrical and mechanical machinery must be disconnected and/or locked out from their power source. Piping must be blanked and/or disconnected and valves must be locked in the closed position. All pipes must be inspected for leakage before entry can be made (for example: inspecting pipes leading into the confined space, or using a flash light to examine interior pipes from the outside). These procedures will prevent the entry of dangerous chemicals or vapors within the confined space while work is taking place. Properly locked-out and tagged-out machinery will prevent other employees in the area from activating the electrical or mechanical process within the confined space. Follow the procedures outlined in the Commissions Lockout/Tagout Program whenever equipment must be rendered inoperable.

Communication Problems

Due to the configurations of many confined spaces, it is very difficult for the attendant to keep visual contact with workers inside. If communication is lost, the worker inside will not be able to notify the attendant of an injury. Communication must be maintained at all times. An alternate system must be established in the event that hand and arm signals or normal voice cannot be used. Intrinsically safe radios, alarms and rope signals can be used.

Noise

Noise within a confined space makes communication difficult and increases the risk of hearing loss. Machinery outside of the confined space or activities inside the confined space, for example, sandblasting or jack hammering, will cause vibration and noise at high decibels. Hearing protection must be used to prevent permanent hearing loss. At the same time, a communication system must be maintained between the workers inside the space and the attendant.

Thermal Stress

There are two types of thermal stress - **hot** and **cold**. Workers may be subjected to very warm temperatures within a confined space. This heat is caused by the use of personal protective clothing and/or the product and location of the space. Heat stress can be reduced by proper ventilation, frequent rest periods and drinking ample water.

Similar dangers exist in a cold environment. When the body temperature decreases, a worker is susceptible to frostbite and hypothermia. Frequent breaks to warm up and donning the proper clothing will help prevent cold stress.

During the cleaning process and ventilation of the confined space(s) with outside ambient air, care should be given to location of the intake so as to not introduce further contaminants (carbon monoxide for example) into the atmosphere. In addition, due to weather conditions, air temperature in the work space(s) should be evaluated as determined in the most recent ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices.

Vibration

Work within a confined space that requires pneumatic tools, e.g., chippers or jackhammers may cause vibration injuries to the hands and fingers. Specially designed gloves are to be worn to minimize the vibration to the hands and arms.

Slips and Falls

Very often the interior of a confined space is not flat. There are sumps, baffles, scaffolding and surface residues or sludge's that can lead to slips, trips or falls. Proper foot protection, and careful movement in the space will help to prevent injury. During the cleaning, re-lining and inspection of tanks surfaces may be, or become, wet and slippery - often personal protective equipment such as boots/gloves or suits may increase slips, trips or falls.

PERSONAL PROTECTIVE EQUIPMENT/SAFETY and RESCUE PROCEDURES

The selection of proper protective clothing is very important for work in confined spaces. Proper selection and use of protective clothing will help prevent injuries and illnesses. This selection process should bring together many factors- the type of work, chemicals involved, physical hazards, size of opening to the confined space, size of the workers and quality of the personal protective equipment itself.

The following discusses categories of personal protective equipment (PPE) that may be needed for confined space entry work. The Supervisor in charge of filling out the permit should consider all of the above factors to determine the most appropriate PPE for each confined space.

Eye Protection

In confined space work, the eyes are exposed to a variety of hazards such as dust, flying objects, splashing of corrosive liquids, welding sparks and arcs and harmful radiation. OSHA requires that eye and face protection be designed to meet the performance requirements set forth in American National Standards Institute (ANSI) Z87.1, Practice for Occupational and Educational Eye and Face Protection. Eye protection should be chosen to protect the worker during specific job tasks. Welders should have protective hoods with tinted lenses to prevent arc burns. Splash goggles should be worn when the danger of splash exists.

Hearing Protection

Working at noise levels above 85 decibels can cause hearing loss. Hearing protection must reduce the decibels down to safe levels. There are three (3) basic types of hearing protection:

1. Disposable, pliable material such as foam plugs
2. Ear plugs which are specifically designed for the wearer
3. Cup-type ear protectors that are worn with a band over the head, or are attached directly to a hard hat

Body Protection

Protective clothing must be selected to provide both chemical protection and physical hazard protection. Suits must be selected using compatibility charts to ensure adequate chemical protection. Durability and dexterity must also be considered to ensure that the worker can perform the job task safely. The Department Supervisor will review environmental conditions and determine the appropriate level of protective equipment and clothing. Attendants and other personnel indirectly involved with the confined space entry (not directly involved with entry operations) must also wear personal protective equipment such as boots, long sleeved shirts, work pants, eyewear, hard hats, etc.

Note: Protective clothing and equipment may be more susceptible to flame, sparks or heat and its use in potentially explosive or explosive atmospheres should be evaluated thoroughly. During welding activities, caution should be exercised to prevent bodily harm. Boots worn beneath protective clothing must meet minimum ANSI guidelines.

Respiratory Protection

Personnel donning any form of respiratory protection (negative-pressure, air-purifying or positive-pressure, air-supplied) must be deemed medically and physically fit and capable of wearing respiratory protection.

Commission employees must wear the appropriate respiratory protection as established in the Respiratory Protection Program. The level of respiratory protection must be based on levels of contaminants such as, but not limited to, VOCs and oxygen levels. In addition, the level of respiratory protection for inspection activities must also be evaluated prior to entry. To ensure that any mechanical ventilation of the space used is suitable, environmental conditions must be evaluated prior to entry to determine the appropriate level of respiratory protection.

Note: Filter-type (air-purifying) respirators are of no value in an oxygen-deficient atmosphere. National Institute for Occupational Safety and Health (NIOSH) approved self-contained oxygen or air-supplied respiratory equipment is required in oxygen-deficient atmospheres. Respiratory protection must be thoroughly evaluated and inspected for proper operating conditions prior to donning and tank/confined space entry. Negative-pressure respiratory protection is only utilized when and where appropriate as determined by environmental monitoring. Cartridges for use with negative-pressure, air-purifying respiratory protection are selected based upon the contaminant present in the space.

Lifelines and Harness

There are three (3) types of lifeline/harness assemblies that can be used to assist with rescue/retrieval of injured employees. These include:

1. Full-body harness - This is the most preferable device to use. This system lifts from the center of the harness so the possibility of injury is minimized. Additionally, this device will help maintain the victim in an upright position. Activities involved with tank entry must be performed utilizing a full-body harness and lifelines. Means of retrieval must be performed utilizing mechanical systems attached to either a beam above the tank or the floor.
2. Wristlets - This device is used when the space has a narrow opening. The victim is lifted by the wrists so that the shoulders pass through the opening without getting stuck. This device is often used in combination with a full-body harness so that injuries to the arms, back and neck can be avoided.
3. Safety belt with D rings - This device is not the first choice. This device pulls from the waist and there is no control over the arms or legs. The victim is subject to back injuries

when pulled while wearing this device. **This device will not be available for use at the Commission.**

Under the OSHA confined space standard, each person entering a hazardous atmosphere within a permit-required confined space must have a lifeline. This lifeline must be attached to a harness assembly, which will allow the attendant to quickly remove entry personnel from the space. The attendant is also responsible for keeping the lines from tangling and keeping close communications with the entry personnel. Some type of retrieval device, such as a winch (non-motorized) or tripod pulley, must be available to assist the attendant in lifting or pulling workers out of the space.

Buddy System

The buddy system is a standard safety practice that must be followed while working in a confined space. This does not necessarily mean there must be at least two people inside the confined space. If only one person is necessary, the entry person should consider the attendant as his/her buddy.

Communication

A system of communication between the entry personnel and the attendant must be established. Verbal and/or visual communication must be maintained at all times. A warning alarm signaling hazardous conditions must be implemented in order to let entry personnel know to leave the confined space immediately. A communication system must be established between the attendant and the contact for a rescue team.

Rescue Procedures

The configuration of the confined space will dictate specific rescue procedures to be followed in case of an emergency. The Commission does not have an in-house rescue team; however, there are a few rules that should be followed in an emergency. During the safety meeting prior to commencement of the confined space entry, rescue procedures and locations of retrieval devices must be selected. The following are basic rescue procedures that should be followed in the event that a rescue from a confined space is necessary.

1. The attendant must not enter the confined space for the purpose of rescuing entry personnel.
2. The attendant will notify the employer that a rescue team is needed without leaving the work area.
3. The attendant will attempt to retrieve personnel with the safety equipment provided, such as, hoists or a block-and-tackle device for lifelines.
4. All rescue personnel will enter the confined space with SCBA. SCBA's may not be necessary if the injury is a broken bone or other physical injury, and the worker in the space is conscious.

Note: Under no circumstances are Commission employees to attempt a rescue by entering a confined space.

WORK PRACTICES and TECHNIQUES

Before work can take place within a confined space, preliminary procedures must take place. The Department Supervisor is in charge of filling out the Confined Space Permit.

Signs: Danger signs or other equivalent means shall be used to warn of existing confined spaces that are accessible by employees and others. The wording shall be "DANGER-PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER" or other equivalent language.

SAFETY MEETING

All employees involved with confined space entry work must attend a confined space specific safety meeting before work begins. All hazards must be reviewed and the measures used to control these hazards must be explained.

This meeting should include any additional site-specific information and designated job duties such as:

- Entry Team
- Attendant
- Decontamination Team (if necessary)
- Supervisor
- Safety Specialist (as applicable)

Employees must sign off on the safety meeting section of the Confined Space Entry Permit stating that they understand all aspects of the above items, as well as all information stated on the permit.

ISOLATION PROCEDURES

The confined space must be completely isolated from all other systems and equipment before entry is to be performed. Measures must be taken to prevent the entry of hazardous substances via pipelines. The method used must prevent the entry of solid, liquids or vapors. There are three (3) common methods of isolation.

The first method involves the disconnecting and removal of pipe fittings closest to the confined space. The end of the pipeline is capped and misaligned, if possible. The pipe leading into the confined space should be drained and blanked (capped). Both procedures prevent product from coming in contact with workers inside and outside the space.

The second method of isolation involves inserting a full-pressure blank between flanges leading to the confined space. Again, the piping from the blanked flange to the space must be drained.

The third method of disconnecting is Lockout/Tagout. Stored energy, whether it is in electrical or mechanical form, can be very dangerous within a confined space. Some spaces move as a whole and some having moving parts within them. Lockout procedures must be in effect if work is to be done in this type of space.

Note: Any company or employee who performs servicing and maintenance of machines and equipment must comply with OSHA standard 29 CFR 1910.147, The Control of Hazardous Energy (Lockout/Tagout). Any outside agency or contractor performing work within the Commission facility must also comply with the Commission's Lockout/Tagout Program.

CLEANING and PURGING TECHNIQUES

When isolation and lockout/tagout procedures have been completed, the confined space may require cleaning and purging. Many factors affect the efficiency of the cleaning process:

- The contents of the confined space;
- Decomposition products or chemical reactions that may change the atmosphere;
- Scale or sludge that has built-up on the walls and floor;
- The configuration of the space, such as baffles or sumps; or,

The size and location of manholes, doorways, vents.

Due to the variety of confined spaces, specific cleaning and purging techniques will be discussed during the meeting prior to commencement of activities. Specific Standard Operating Procedures will be designed for each confined space at the facility.

VENTILATION TECHNIQUES

There are basically two (2) ways to ventilate a confined space - natural ventilation and mechanical ventilation.

Natural Ventilation consists of opening doors, hatches, manways and side covers to allow the natural air currents to ventilate the confined space. The exchange of gases and vapors is unpredictable and the direction of these escaping vapors may cause hazardous atmospheres in the adjacent work areas. This method is not recommended, as there may be limited access or incomplete distribution of air. However, if the sole atmospheric danger is low oxygen content, natural ventilation may be effective. Proper oxygen monitoring must be performed to establish the effectiveness of natural ventilation.

Mechanical Ventilation is accomplished by directing a flow of air into the space by the use of a blower unit and hosing. All mechanical/electrical equipment used for ventilation should be grounded and, in the case of explosive or combustible atmospheres, should be explosion-proof (intrinsically safe). The following precautions are recommended:

1. Exhausted air must be directed to an area where it can be dispersed without causing harm to other employees or work processes.
2. The mechanical exhaust system should be kept in operation during the entire work period to ensure that the air in the space remains safe.
3. Ventilation must maintain the lower explosive limit (LEL) below 10%, the oxygen above 19.5% and the contaminants below Permissible Exposure Limits (PEL). If the oxygen and other levels cannot be maintained, **no entry shall be made**. If, at any time, during entry, the LELs rise higher than 10%, and/or the oxygen levels go below 19.5% or above 23.5%, and/or the PEL of any contaminant is reached, **all entrants will leave the space immediately**. At this time, a more effective ventilation method must be addressed.

TOOLS and EQUIPMENT

The type of tools to be used within the confined space will depend on the type of work, which needs to be accomplished. Air-operated pneumatic tools are preferable over electrically driven tools because they are less likely to ignite in an explosive atmosphere. When the use of portable electrical tools is unavoidable, they must be used with ground-fault circuit interrupters and be fully grounded. Non-sparking (brass) hand tools shall be used when work is conducted in an explosive atmosphere. Temporary lights should be explosion-proof and have guards to prevent contact with bulbs.

Equipment must be suitable for use with the products in the space. For example, very acidic or alkaline solutions may oxidize and corrode metal tools. Material Safety Data Sheets should state what the chemical would react with.

PERMITTING and TESTING for ENTRY into PERMIT-REQUIRED CONFINED SPACES

Permitting

Entry into a Permit-Required Confined Space is only performed once a permit has been completed. The "Permit Form" which must be filled out and signed each time a permit-required confined space is entered by Commission employees. The permit is an authorized approval

specifying the location of the confined space, the type of work to be done, and that a qualified person has evaluated the atmosphere and hazards.

Only the Department Supervisor can issue the permit. The permit reviews that the following items have been completed.

1. Location and description of the work to be done.
2. Hazards that may be encountered.
3. Isolation procedures have been accomplished including:
 - Blanking and/or disconnecting of piping
 - Electrical Lockout and Tagout
 - Mechanical Lockout and Tagout
4. Clothing and equipment has been selected and is compatible with the hazardous atmospheres within the space. This selection should include consideration of the following types of equipment to be used:
 - Personal protective equipment
 - Safety harness and lines
 - Tools
 - Approved electrical equipment
5. Atmospheric test readings have been taken including:
 - Oxygen levels
 - Flammability and/or explosive levels
 - Toxic substance levels
6. Continuous monitoring while work is being performed
7. All employees involved with the work in the confined space have been properly trained and understand the hazards involved with the work.
8. Attendant(s) is specifically named on the permit.
9. Written Emergency Procedures and locations of First Aid and rescue equipment have been prepared.
10. Procedures to provide pedestrian, vehicle, or other barriers necessary to protect authorized entrants and to prevent unauthorized entry have been conducted.

The confined space permit must be dated and will be valid for one work shift only. Work that requires more than one shift to complete must receive an authorized permit for each shift. At completion of work, the permit must be voided.

The permit must be posted close to the entrance in plain view the second copy must be filed with the Department Supervisor and a copy sent to the Risk Management and Safety Office. In addition as stated previously in this document, the space must be posted with a sign indicating that it is a permit-required confined space and only authorized employees are allowed to enter.

Atmospheric Testing

Confined spaces which have been identified to have the potential to contain an atmosphere that is immediately dangerous to life or health (IDLH) require that continuous monitoring of oxygen (O₂) levels, explosive gas levels and toxic substances levels is performed. All tests must be

conducted by a qualified person and recorded in a log. In addition, all instruments must be calibrated in accordance with the manufacturer's guidelines. Equipment used for continuous monitoring of gases and vapors must be direct reading instruments with audible alarms to warn of hazardous constituents or atmospheres.

When tests indicate the concentration of explosive gases is 10% or greater, **no entry is permitted**. Hot Work is only permitted in the confined space when levels do not exceed 8%. When tests indicate levels of toxic contaminants are above Permissible Exposure Limits (PELs), self-contained or air-supplied respiratory protection **must** be worn. When monitoring instruments indicate oxygen levels below 19.5%, positive-pressure, and air-supplied respirators **must** be worn. Entry should not be made to a confined space with oxygen readings above 23.5%, and ventilation techniques should be used to reduce oxygen levels to approximately 21%.

ESTABLISHING and TESTING PERMIT-REQUIRED CONFINED SPACES ENTERED by ALTERNATE PROCEDURES

Establishing A Space For Alternate Procedures Entry

An alternate procedures space is a permit-required confined space where:

1. The only hazard posed by the space is atmospheric; and
2. The use of continuous forced air ventilation alone maintains safe entry.

In order to establish data to support the above conditions, monitoring and inspection information must be collected. This information is maintained and kept on file in Risk Management and Safety Office. If the space must first be entered to collect supporting data, it must be done so in accordance with the requirements for entry into a permit-required confined space. Though once this information is collected, the space may be entered using abbreviated procedures as an alternate procedures space. Alternate procedures spaces **do not** require a permit be completed prior to entry, or specific rescue procedures to be in place.

Requirements For Entry Into Alternate Procedures Spaces

Prior to entry the Department Supervisor must certify that the space is safe to enter and that appropriate measures have been taken to eliminate the potential for a hazardous atmosphere to exist in the space. This certification must be written and include the date, the location of the space, and the signature of the Department Supervisor. This certification must be made available to each employee entering the space prior to entry.

The following are requirements for entry into alternate procedures spaces:

1. Any conditions, which make it unsafe to remove an entrance cover, must be eliminated before the cover is removed.
2. When entrance covers are removed, the opening must be promptly guarded by a railing, temporary cover, or other temporary barrier to prevent an accidental fall through the opening and protect the employees working in the space from foreign objects entering the space.
3. Prior to any employees entering the space, the internal atmosphere must be tested with a calibrated direct-reading instrument for the following conditions, in order:

Oxygen content;
Flammable gases and vapors; and
Potential toxic air contaminants

Note: There cannot be any hazardous atmosphere within the space while employees are inside

4. Continuous forced air ventilation must be used as follows:

Employees must not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.

The forced air ventilation must be directed so as to ventilate the immediate areas where employees are, or will be present within the space and must continue until all employees have left the space.

The air supply for the forced air ventilation must be from a clean source and not increase the hazards in the space.

5. The atmosphere within the space must be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. If a hazardous atmosphere is detected during entry, the following must occur:

Employees must leave the space immediately.

The space must be evaluated to determine how the hazardous atmosphere developed.

Measures must be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

CONFINED SPACE ENTRY JOB DUTIES

The following duties are segregated into four (4) job titles. Many of the duties described overlap, the purpose of which is to establish an educated, "safety-minded," confined space entry crew.

Authorized Entrants

The Commission ensures that authorized entrants have knowledge and a thorough understanding of:

- Procedure and method for initiating emergency/rescue services.
- Procedure for aborting entry.
- Confined Space Entry Procedures (CSEP).

In addition, it is the authorized entrants responsibility to:

- Know the hazards which may be faced during entry and determine acceptable quantified environmental conditions.
- Recognize the signs and symptoms of exposure.
- Understand the consequences of exposure to hazards.
- Determine acceptable quantified environmental conditions.
- Maintain contact with the attendant and understand the method(s) of communication.
- Notify the attendant when initiating self-evacuation from the confined space.
- Are familiar with the personal protective equipment necessary to make a safe entry and exit.
- Understand the proper effective use and the limitations of monitoring equipment, and know how to troubleshoot and calibrate the instruments.
- Are provided with the appropriate personal protective equipment.
- Use the personal protective equipment properly.

- Are aware of the barriers necessary to protect entrants from external hazards and the proper use of those barriers, i.e., Lockout/Tagout.
- Make sure proper signs are posted warning of hazardous areas.
- Leave the confined space when ordered to do so by the attendant or when an automatic alarm is activated.
- Leave the confined space when the entrants perceive that they are in danger.

Attendant

The Commission ensures that an attendant is stationed at, and remains immediately outside, the confined space(s) at all times during entry operations.

Attendants have knowledge and a thorough understanding of:

- Procedure and method for initiating emergency/rescue services.
- Procedure for aborting entry.
- Confined Space Entry Protocol (CSEP).
- In addition, it is the attendant's responsibility to:
 - Continuously maintain an accurate count of all persons in the space.
 - Have knowledge of and the ability to recognize potential confined space hazards.
 - Monitor activities both inside and outside of the confined space to determine if conditions are safe for entrants to remain in that space.
 - Maintain effective and continuous contact with authorized entrants during entry.
 - Order authorized entrants to evacuate immediately if:
 - The attendant observes a condition, or conditions, which is/are not allowed in the entry permit.
 - The attendant detects behavioral effects of hazard exposure.
 - The attendant detects a situation outside the confined space, which could endanger the authorized entrant(s).
 - The attendant detects an uncontrolled hazard within the confined space.
 - The attendant must leave the workspace or area.
- Summon rescue and other emergency services using available emergency phone numbers listed on the entry permit, as soon as the attendant determines that entrants need to escape from the confined space.
- Warn unauthorized persons away from the space.
- Request the unauthorized person(s) to exit immediately if they have entered the confined space.
- Inform the authorized entrants and the employer if unauthorized persons have entered the confined space.
- Properly use any rescue equipment provided and perform any assigned rescue and emergency duties without entering the confined space.
- Attendants **ARE NOT** to enter the confined space to attempt rescue of entrants.

Department Supervisors and/or Personnel in Charge of Entry

The Commission ensures that individuals who authorize entry into a confined space, or who are in charge of entry have knowledge and a thorough understanding of the:

- Procedure and method for initiating emergency/rescue services.
- Procedure for aborting entry.
- Confined Space Entry Procedures (CSEP).

In addition, Department Supervisors and/or Personnel in Charge of Entry are responsible to:

- Determine that the entry permit contains the requisite information before authorizing or allowing entry.
- Determine that the necessary procedures, practices and equipment for safe entry are in effect before allowing entry.
- Determine, at appropriate intervals, that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are present.
- Cancel the entry authorization and terminate entry whenever acceptable entry conditions are not present.
- Take necessary measures for concluding an entry operation such as closing off a permit space and canceling the permit once all work authorized by the permit is completed.
- Serve as authorized entrants or authorized attendants if properly trained to do so.
- Take appropriate measures to remove unauthorized personnel who are in or near the confined space.
- Making sure the space is posted properly with the confined space sign(s), the entry permit and hot work permit (if necessary).
- Keeping the records of the entry and forwarding a copy to the Risk Management and Safety Office.
- Department Supervisors and/or Personnel in Charge of Entry **ARE NOT** to enter confined space to attempt rescue of entrants.

Rescue Team

The Commission does not have an in-house rescue team; therefore, appropriate arrangements have to be made for outside rescue services.

The schedule for confined space entry (or entries): shifts/hours of operation start dates and expected completion dates.

Emergencies

To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant

The entry supervisor, prior to the initial entry of personnel into a confined space, shall ensure the rescue equipment and retrieval system is functioning properly.

TRAINING

The Commission shall ensure that all authorized entrants, attendants, persons authorizing and/or in charge of entry and rescue personnel are thoroughly trained in the job duties listed in Confined Space Entry Job Duties.

Training is provided to all employees involved in confined space entry operations. The purpose of this training is to establish that such persons acquire the understanding, knowledge and skills outlined in this written program, as well as any additional information necessary for the safe performance of assigned duties.

Training is provided:

- Before an employee first performs assigned duties that require entry into confined spaces;
- Annually as a refresher;
- Before there is a change in assigned duties;

- Whenever there is a change in permit-required confined space operations that presents a hazard for which an employee has not previously been trained; and,
- Whenever there are deviations from the permit-required confined space entry procedures identified for a space, or there are inadequacies in the employee's knowledge or use of these procedures.

RECORDKEEPING

The Department Supervisor will keep on file for at least one year, copies of: all entry permits; training of authorized entrants, attendants, supervisors; and any documentation of non-compliance with permit and other health and safety issues in order to facilitate the review of the confined space program. Copies of all entry permits and training documentation must be forwarded to the Risk Management and Safety Office.

In addition, documentation of all environmental and atmospheric testing as applicable to the confined space entry permit system is also maintained as part of this program.



PRACTICE

Approved by

The Commission

No. 2-26

Initially issued: 09/25/1995

Last amended: 02/01/2017

Last reviewed: 02/01/2017

CONTROLLED SUBSTANCE and ALCOHOL-FREE WORKPLACE

AUTHORITY

This Practice was initially approved by the Commission effective September 25, 1995.



Patricia Colihan Barney, Executive Director

PURPOSE/ BACKGROUND

Controlled substance and alcohol abuse is a serious problem which endangers the health and safety of users, their co-workers, and M-NCPPC patrons. It can adversely affect an employee's overall job performance by impairing decisions and actions, lowering efficiency, and eroding attention to safety and quality. The Practice, as initially issued, has been amended as follows:

- July 15, 2004: Policy reviewed and references updated to reflect applicable policies and federal/state regulations pertaining to drug/alcohol use.
- June 6, 2013: Minor edits made to reflect updated references, and amendments were made to the accompanying Administrative Procedures to incorporate Federal testing protocols mandated by the Department of Transportation (DOT) and the Department of Health and Human Services (HHS) for DOT regulated employees; clarify existing provisions, and amend provisions for improved program effectiveness.
- February 17, 2016: Amendments were made to the accompanying Administrative Procedures to reflect changes in the agency's Employee Assistance Program (EAP) Provider.
- February 1, 2017: Minor amendments were made to the accompanying Administrative Procedures to update definitions and reflect change in medical provider.

REFERENCES

- Merit System Rules and Regulations including, but not limited to, Workplace Conduct and Discipline;
- Federal Drug Free Workplace Act, as amended in 1996;
- Maryland Executive Order 01.01.1989.18, Drug and Alcohol Free Workplace (Non-State Entities);
- Job-Related Alcohol and Controlled Dangerous Substances Testing, §17-214, Health-General Article, Annotated Code of Maryland;
- The Federal Omnibus Transportation Employee Testing Act of 1991;
- "Procedures for Transportation Workplace Drug and Alcohol Testing Programs," Code of Federal Regulations Title 49, Part 40;
- "Controlled Substances and Alcohol Use and Testing," Code of Federal Regulations Title 49, Part 382;
- Americans with Disabilities Act, 1990 (amended in 2009);

- Federal Department of Transportation Federal Motor Carrier Safety Administration, Rules and Regulations, Drug and Alcohol Program.

APPLICATION

This policy applies to all employees on duty. Employees who hold a Commercial Driver's License (CDL) must comply with all additional federal and state drug and alcohol mandates including CDL drug/alcohol requirements as issued by the U.S. Department of Transportation (DOT) and the Federal Highway Administration. Employees should refer to their respective bargaining agreements for specific requirements.

POLICY

The M-NCPPC prohibits the manufacture, distribution, sale, presence, or use of controlled substances and alcohol in the workplace, M-NCPPC vehicles, and other agency property. Reporting to work while under the influence of controlled substances or alcohol is prohibited. The Commission reserves the right to enforce this policy through controlled substance and alcohol testing.

In accordance with the Federal Drug-Free Workplace Act and Maryland Drug and Alcohol-Free Workplace mandates, employees must notify the agency of any drug or alcohol related criminal conviction that occurs in the workplace. Employees must provide notification of their conviction no later than five (5) days after the date of the occurrence.

Employees in violation of any part of this policy may be subject to disciplinary action up to, and including, termination of employment. At a minimum, employees shall receive a formal supervisory referral to the agency's Employee Assistance Program. Employees will also be required to enroll in and successfully complete any necessary treatment through a certified rehabilitation program.

All disciplinary actions shall be administered in accordance with Merit System Rules and Regulations and any other applicable laws and regulations. Violations of any part of this policy may also result in legal consequences up to and including criminal prosecution.

PROCEDURES

The Executive Director shall take necessary action for the implementation of this policy through the issuance of Administrative Procedures, "Controlled Substance and Alcohol-Free Workplace Program." These procedures shall inform employees and supervisors about the provisions of the policy and include direction for the prevention, reporting, and handling of controlled substances and alcohol in the workplace.

SECTION 5.05 Electrical

The Commission has implemented this Directive for electrical safety and complies with Title 29 Code of Federal Regulations (CFR) §1910 Subpart S, and the National Electrical Code (NEC).

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply when employees are working on or around equipment that contains an electrical hazard.

APPLICABILITY

This Directive applies to all Commission employees who are required to work on or around equipment that contain electrical hazards.

PURPOSE

To establish the procedures that shall be followed in the safe performance of work activities involving general electrical hazards. Employees who face a risk of electrical shock or related injuries shall be trained in the appropriate electrical safety work practices. In addition, employees that work around, but not on, electrical systems shall be trained in the hazards associated with electricity.

The Risk Management and Safety Office has developed this Directive to:

Assure that departments understand and comply with the regulatory requirements related to electrical work;

Assure the safety of employees who may work in the vicinity of, or on, electrical systems; and

Assure that all departments that perform electrical work follow uniform work practices.

APPLICATION

Each department that performs work covered by this Directive must designate one or more employee(s) to coordinate the requirements of this Directive at departmental worksites. Furthermore, it is recommended that each work unit supervisor that oversees work covered by this Directive be designated to coordinate this Directive in his or her work area. These supervisors will assist the Risk Management and Safety Office with training departmental staff that work on or near electrical systems, and will review and verify the skills and competency of departmental workers.

The Risk Management and Safety Office will periodically review the effectiveness of this Directive. If deficiencies are found with the Directive or employee training, the Directive and/or training will be modified to address these deficiencies.

SCOPE

This Directive applies to all Commission properties and all electrical work performed by Commission employees regardless of jobsite location. All employees who face a risk of electrical shock, burns or related injuries must be trained in electrical safety work practices. These work practices must always be followed. In addition, employees that work around, but not on, electrical systems must be trained in the inherent danger of electricity. This Directive describes work practices for both **qualified** and **unqualified** persons.

Qualified persons are those who have received specific training and have demonstrated the skills necessary to work safely on or near exposed energized parts. A person may be qualified to work, for example, on circuits up to 600 volts, but may be unqualified to work on higher voltages. Only qualified persons may place or remove locks and tags on energized electrical systems

Unqualified persons are those with little or no such training

An employee undergoing on-the-job training who has demonstrated the ability to perform duties safely at his or her level of training, and who is under the direct supervision of a qualified person, is considered to be a qualified person for the purpose of those duties.

Work practices covered by this Directive include persons working on or near:

Premises wiring installations of electric conductors and equipment in or on buildings or other structures, and in other areas such as yards, parking and other lots and industrial substations.

Wiring for connection to supply: Installations of conductors that connect to the supply of electricity.

Other wiring: Installation of other outside conductors on the premises.

Optical fiber cable: Installation of optical fiber cable near or with electric wiring.

Work practices covered by this Directive also include work performed by *unqualified* persons near or with electric power generation, transmission, and distribution installations, communications installations, installations in vehicles, and railway equipment.

This Directive does not apply to:

Work performed by *qualified* persons on or directly associated with electric power generation, transmission, and distribution, including the repair of overhead or underground distribution lines, line clearance tree trimming and utility pole replacement.

Work in a generating plant where the electric circuits are commingled with power generation equipment or circuits and where there is exposure to high voltage or lack of overcurrent protection.

Communication installations.

RESPONSIBILITIES

The Risk Management and Safety Office is responsible for developing, implementing, and administering this Directive. This involves:

- Training supervisors/designated departmental program coordinators and their employees.
- Maintaining centralized records of training, energy control procedures, and inspection data and reports.
- Providing technical assistance to Commission employees.
- Developing and maintaining the Directive, training programs and other training resources that can be used by Commission employees.
- Evaluating the overall effectiveness of this Directive on a periodic basis.

DEPARTMENTAL RESPONSIBILITIES

Departments are expected to maintain safe and healthful work environments for employees and the general public. Departments are expected to assure that all employees are thoroughly familiar with their safety responsibilities and that safety practices are followed at all times. Departmental worksites should be inspected on a frequent basis to identify and correct hazards. Employees are expected to comply with all safety requirements and act proactively to prevent accidents and injuries by communicating hazards to supervisors.

TRAINING

Employees who face a risk of electrical shock that is not reduced to a safe level by the electrical installation (e.g., systems that meet the National Electrical Code and OSHA requirements) must be trained per the requirements of this Directive. Employees in the following occupations must be trained:

- | | |
|--|---|
| • Supervisors of employees performing work around or on electrical systems | • Material handling equipment operators |
| • Mechanics | • Tree Climbers |
| • Electricians | • Plumbers |
| • HVAC Mechanics | • Welders |
| • Building and Ground Maintenance | • Heavy Equipment Operators |
| • Art Exhibit Specialists | • Painters |

Employees in these groups do not require training if their work does not bring them close enough to exposed parts of electric circuits—operating at 50 volts or more to ground—for a hazard to exist. Qualified persons working on or near exposed energized parts must receive training in the following:

- The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment;
- The skills and techniques necessary to determine the nominal voltage of exposed live parts; and,
- The clearance distances specified for working on or near exposed energized parts and the corresponding voltages to which the qualified person will be exposed.

Qualified persons whose work on energized equipment involves either direct contact, or contact by means of tools or materials, must be trained on how to work safely on energized circuits. These employees must be familiar with proper precautionary work practices, personal protective equipment, insulating and shielding materials, and the use of insulated tools.

The training for qualified and unqualified employees will involve both classroom and on-the-job training. This training will be coordinated between the Risk Management and Safety Office and the work unit supervisor, and customized to reflect the scope of work performed within that work unit. The work unit supervisor will review, or coordinate the review, of the work performed by each employee to assure that they demonstrate the skills and techniques needed to perform their work safely.

- Training must be performed before the employee is assigned duties involving work around or on electrical systems.
- Retraining will be performed whenever inspections performed by the Risk Management and Safety Office or the employee's supervisor indicate that an employee does not have the necessary knowledge or skills to safely work on or around electrical systems. Retraining will also be performed when policies or procedures change and/or new equipment or systems are introduced into the work area.

ELECTRICAL INSTALLATION REQUIREMENTS

Free from Recognized Hazards

Electrical equipment must be free from recognized hazards that are likely to cause death or serious physical harm. Equipment must be suitable for the installation and use, and must be installed and maintained in accordance with the manufacturers instructions, the National Electrical Code (NEC) and OSHA. "Suitable" means that the equipment is listed or labeled for the intended use by a nationally recognized testing laboratory such as Factory Mutual (FM) or Underwriters Laboratory (UL).

Labeling of Disconnects

Each disconnecting means—the switch or device used to disconnect the circuit from the power source—must be clearly labeled to indicate the circuit’s function unless it is located and arranged so the purpose is evident. Identification should be specific rather than general; a branch circuit serving receptacles in a main office should be labeled as such, not simply labeled “receptacles”. All labels and marking must be durable enough to withstand the environment to which they may be exposed.

Guarding of Live Parts

Live parts of electric equipment operating at 50 volts or more must be guarded against accidental contact. Proper guarding can be achieved by use of an approved cabinet or other approved enclosure, by location in a room or vault that is accessible to qualified persons only, or by elevating the equipment or controlling the arrangement of the space to prevent contact by unqualified persons. If electric equipment is located in an area where it is potentially exposed to physical damage, the enclosure or guard must be of sufficient strength to prevent such damage.

GENERAL WIRING DESIGN and PROTECTION

New electrical wiring, and the modification, extension or replacement of existing wiring must conform to the requirements of the NEC and OSHA and the following:

- No grounded conductor may be attached to any terminal or lead so as to reverse designated polarity.
- The grounding terminal or grounding-type device on receptacles, cord connector, or attachment plug may not be used for any purpose other than grounding.
- Conductors and equipment must be protected from overcurrent above their safe current carrying capacity.
- All AC systems of 50 to 1,000 volts must normally be grounded as required by the NEC and OSHA. The path to ground from circuits, equipment and enclosures must be permanent and continuous. Existing ungrounded premises wiring does not meet the OSHA requirements and must be replaced or modified as needed to meet this requirement. For information on exceptions to these requirements, please contact the Risk Management and Safety Office.
- Conductors entering boxes, cabinets or fittings must be protected from abrasion, and openings through which conductors enter must be effectively closed. Unused openings in cabinets, boxes and fixtures must also be effectively closed.
- All pull boxes, junction boxes and fittings must be provided with covers approved for the purpose. If metal covers are used they must be grounded. In completed installations, each outlet box must have a cover faceplate or fixture canopy. Pull boxes and junction boxes for systems over 600 volts, nominal, must provide complete enclosure, the boxes must be closed by suitable covers securely fastened in place, and the cover must be permanently marked “High Voltage”.
- Switchboards and panelboards that have exposed live parts must be located in permanently dry locations and accessible to qualified persons only. Panelboards must be mounted in cabinets, cutout boxes or other approved enclosure, and must be dead front unless accessible to qualified persons only. Exposed blades of knife switches must be dead when open. Receptacles installed in damp or wet locations must be suitable for the location.
- Cabinets, cutout boxes, fittings, boxes and panelboard enclosures in damp or wet locations must be installed so as to prevent moisture or water from entering and accumulating within the enclosure. In wet locations the enclosures must be weatherproof.
- Fixtures, lamp holders, lamps, rosettes, and receptacles may have no live parts normally exposed to employee contact.
- Screw-base light socket adapters do not maintain ground continuity and may not be used.
- Multiplug receptacle adapters may not maintain ground continuity or may overload circuits and must not be used. If additional receptacles are needed in a work location, additional circuits and/or receptacles must be installed. Multi-plug power strips with overcurrent protection are acceptable for use with electronic equipment if they are used to reduce line noise or to provide surge or overcurrent protection. All multiplug adapters shall be UL labeled and approved.

- Electrical equipment, wiring methods and installations of equipment in hazardous classified locations must be intrinsically safe, approved for the location, or safe for the location. Hazardous classified locations are areas where flammable liquids, gases, vapor, or combustible dusts or fibers exist or could exist in sufficient quantities to produce an explosion or fire.

REQUIREMENTS for TEMPORARY WIRING

Temporary electrical power and lighting installations 600 volts or less, including flexible cords, cables and extension cords, may only be used during and for renovation, maintenance, repair, or experimental work. Temporary wiring may also be used for decorative lighting for special events and similar purposes for a period not to exceed 90 days. The following additional requirements apply:

- Ground-fault protection (e.g., ground-fault circuit interrupters, or GFCI) must be provided on all temporary-wiring circuits, including extension cords, used on construction sites.
- In general, all equipment and tools connected by cord and plug must be grounded. Listed or labeled double insulated tools and appliances need not be grounded. For information on exceptions to these requirements, please contact the Risk Management and Safety Office.
- Feeders must originate in an approved distribution center, such as a panelboard, that is rated for the voltages and currents the system is expected to carry.
- Branch circuits must originate in an approved power outlet or panelboard.
- Neither bare conductors nor earth returns may be used for the wiring of any temporary circuit.
- Receptacles must be of the grounding type. Unless installed in a complete metallic raceway, each branch circuit must contain a separate equipment-grounding conductor, and all receptacles must be electrically connected to the grounding conductor.
- Flexible cords and cables must be of an approved type and suitable for the location and intended use. They may only be used for pendants, wiring of fixtures, connection of portable lamps or appliances, elevators, hoists, connection of stationary equipment where frequently interchanged, prevention of transmission of noise or vibration, data processing cables, or where needed to permit maintenance or repair. They may not be used as a substitute for the fixed wiring, where run through holes in walls, ceilings or floors, where run through doorways, windows or similar openings, where attached to building surfaces, or where concealed behind building walls, ceilings or floors.
- Suitable disconnecting switches or plug connects must be installed to permit the disconnection of all ungrounded conductors of each temporary circuit.
- Lamps for general illumination must be protected from accidental contact or damage, either by elevating the fixture or by providing a suitable guard. Handlamps supplied by flexible cord must be equipped with a handle of molded composition or other approved material and must be equipped with a substantial bulb guard.
- Flexible cords and cables must be protected from accidental damage. Sharp corners and projections are to be avoided. Flexible cords and cables must be protected from damage when they pass through doorways or other pinch points.

OPEN CONDUCTORS, CLEARANCE from GROUND

Open conductors must be located at least 10 feet above any finished grade, sidewalk or projection, 12 feet above areas subject to non-truck traffic, 15 feet above areas subject to truck traffic, and 18 feet above public streets, roads or driveways.

ENTRANCES and ACCESS to WORKSPACE

In any workspace where there is electric equipment operating at over 600 volts, there must be at least one entrance at least 24 inches wide and 6 feet, 6 inches high to permit escape in the event of an emergency. Any exposed energized conductors operating at any voltage and located near the entrance must be guarded to prevent accidental contact. Any insulated energized conductors operating at over 600 volts and located next to the entrance must also be guarded.

WORKING SPACE about ELECTRIC EQUIPMENT

Sufficient access and working space must be provided and maintained around all electric equipment to permit ready and safe operation and maintenance of the equipment.

Working clearances may not be less than 30 inches in front of electric equipment. Except as permitted by OSHA or the NEC, the working space in front of live parts operating at 600 volts or less that require servicing, inspection or maintenance while energized may not be less than indicated in Table 1. This working space may not be used for storage.

TABLE 1
Working Clearances

Nominal Voltage to Ground	Minimum Clear Distance for Condition ⁽³⁾		
	A	B	C
0-150	3' ⁽¹⁾	3' ⁽¹⁾	3'
151-600	3' ⁽¹⁾	3-1/2'	4'
601-2,500	3'	4'	5'
2,501-9,000	4'	5'	6'
9,001-25,000	5'	6'	9'
25,001-75 kV ⁽²⁾	6'	8'	10'
Above 75 kV ⁽²⁾	8'	10'	12'

(1) Minimum clear distance may be 2-1/2' for installations built prior to April 16, 1981.

(2) Minimum clear distance in front of electrical equipment with nominal voltage to ground above 25 kV may be the same as for 25 kV under conditions A, B and C for installations built prior to April 16, 1981.

(3) Conditions A, B and C are as follows: (A) Exposed live parts on one side and no live or grounded parts on the other side of the working space, or exposed live parts on both sides are effectively guarded by an insulating material. Insulated wire or insulated busbars operating at not over 300 volts are not considered live parts. Concrete, brick or tile walls are considered grounded. (B) Exposed live parts on one side and grounded parts on the other. (C) Exposed live parts on both sides of the workspace not guarded as per condition (A), with the operator between.

SELECTION and USE of WORK PRACTICES

The work practices used by an employee must be sufficient to prevent electric shock or other injuries that could result from either direct or indirect electrical contact. These work practices must be used when work is performed near or on equipment or circuits that are or may be energized. The work practices used must be consistent with the nature and extent of the electrical hazard.

WORKING on ELECTRICAL SYSTEMS

Energized Parts: Only qualified employees are allowed to work on electric parts or equipment that has not been de-energized using approved lockout/tagout procedures. Live parts to which an employee may be exposed will be de-energized before the employee works on or near them, unless:

- De-energizing introduces additional or increased hazards. Examples of “additional or increased” hazards include interruption of life support equipment, deactivation of emergency alarm systems, shutdown of fume hood ventilation systems, or removal of illumination for an area.
- De-energizing is not possible due to equipment design or operational limitations. Examples include testing that can only be performed with the electrical circuit energized, and work on circuits that form an integral part of a continuous process that would need to be completely shut down in order to permit work on one circuit or piece of equipment.
- Live parts operate at less than 50 volts to ground and there is no increased exposure to electrical burns or to explosion due to electric arcs.

If de-energizing exposed live parts could add to or increase the hazard or is not possible, then other approved work practices must be used to protect employees who may be exposed to the electrical hazards. The work practices used must protect employees from contact with energized circuit parts directly with any part of their body or indirectly through some other conductive object. The work practices used must be suitable for the conditions under which the work is performed and for the voltages of exposed electric conductors or circuit parts.

WORKING On or NEAR EXPOSED DE-ENERGIZED PARTS

When employees work on exposed de-energized parts or near enough to them to expose the employee to an electrical hazard, then the following safety-related work practices will be followed.

- Any conductors or parts of electric equipment that have not been properly locked and/or tagged out must be treated as energized even if these systems have been de-energized.
- If the potential exists for an employee to contact parts of fixed electric equipment or circuits that have been de-energized, the circuits energizing the parts must be locked and/or tagged out. Locking and tagging procedures must comply with Commissions *Lockout/Tagout Directive* and the requirements outlined in this Directive.

DE-ENERGIZING EQUIPMENT

- Safe procedures for de-energizing circuits and equipment will be determined by a qualified worker before the circuit or equipment is de-energized.
- Circuits and equipment to be worked on will be disconnected by the worker from all electric energy sources. Control circuit devices, such as push buttons, selector switches, and interlocks will not be used as the sole means for de-energizing circuits or equipment. Interlocks for electric equipment may not be used as a substitute for lockout and tagging procedures.
- Stored electrical energy that might endanger personnel must be released prior to the work. This might include, for example, discharging capacitors and transformers, and short-circuiting and grounding high capacitance elements. If the capacitors or associated equipment are handled during this work, they must be treated as energized.
- Stored non-electrical energy (for example, hydraulic or pneumatic) in devices that could reenergize electric circuit parts must be blocked or relieved so that circuit parts cannot be accidentally re-energized by the device.
- A lock and tag must be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be done. The lock must be attached so as to prevent persons from re-energizing the circuit unless they resort to undue force or the use of tools.

VERIFICATION of DE-ENERGIZED CONDITION

The following requirements must be met before any circuit or equipment is considered de-energized or may be worked on as de-energized.

- A qualified person must activate the equipment operating controls or use other methods to verify that the equipment cannot be restarted.
- A qualified person must use test equipment to ensure that electrical parts and circuit elements are de-energized. The test must confirm there is no energized condition from induced voltage or voltage backfeed.
- Test equipment and instruments must be visually inspected for external defects or damage before being used to verify that the equipment or circuit is de-energized.
- When voltage over 600 volts nominal are tested, the test equipment must be checked for proper operation immediately before and after the test.

RE-ENERGIZING EQUIPMENT

In addition to the requirements of the Lockout/Tagout Program, the following requirements must be met, in the order given, before circuits or equipment are re-energized, even temporarily:

- A qualified person must conduct tests and visual inspections as necessary to verify that all tools, electrical jumpers, shorts, grounds and other such devices have been removed so that circuits and equipment can be safely energized;
- Employees potentially exposed to the hazards of re-energizing the circuit must be warned to stay clear; and,
- Each employee removes his or her lock(s) and tag(s).

OVERHEAD POWER LINES

When work is to be performed near overhead lines, the lines must be de-energized and grounded. Arrangements must be made with the organization that operates or controls the electric circuits when lines are to be de-energized and grounded.

If this is not possible to de-energize and ground overhead lines, then other protective measures, such as guarding, isolating or insulating, must be taken before the work is started. These protective measures must prevent direct contact by the qualified person or indirect contact through conductive materials, tools, or equipment. Only qualified persons from the power distribution company are allowed to install insulating devices on overhead power transmission and distribution lines. All other persons, and any conductive object used by these employees, may not approach closer than the minimum distance specified in Table 1 when working in an elevated location near unguarded, energized overhead lines. Unqualified persons working on the ground are not allowed to bring any conductive object or any insulated object that does not have the proper insulating rating closer to unguarded, energized overhead lines than the distance allowed in Table 2.

TABLE 2

Voltage to Ground	Minimum Approach Distance
50 kV or less	10 feet
Over 50 kV	10 feet + 4 inches for every 10 kV over 50 kV

Qualified employees working in the vicinity of overhead lines, whether in an elevated position or on the ground, are not allowed to approach or take any conductive object without an approved insulating handle closer to exposed energized parts than allowed in Table 3 unless:

- The person is insulated from the energized part by using gloves, with sleeves if necessary, rated for the voltage involved; or
- The energized part is insulated from all other conductive objects at a different potential and from the person; or
- The person is insulated from all conductive objects at a potential different from the energized part.

TABLE 3

APPROACH DISTANCES FOR QUALIFIED PERSONS EXPOSED TO ALTERNATING CURRENT	
Voltage Range (phase-to-phase)	Minimum Approach Distance
300 V and less	Avoid contact
Over 300 V, not over 750 V	1 ft. 0 in.
Over 750 V, not over 2 kV	1 ft. 6 in.
Over 2 kV, not over 15 kV	2 ft. 0 in.
Over 15 kV, not over 37 kV	3 ft. 0 in.
Over 37 kV, no over 87.5 kV	3 ft. 6 in.
Over 87.5 kV, not over 121 kV	4 ft. 0 in.
Over 121 kV, not over 140 kV	4 ft. 6 in.

VEHICLES and MECHANICAL EQUIPMENT

A minimum clearance of 10 feet must be maintained between energized overhead lines and all vehicles or mechanical equipment capable of having parts or its structure elevated (e.g., cranes, mobile scaffolds, elevating platforms, dump trucks, lift trucks, and flatbed trailer cranes). If the voltage of the overhead line is greater than 50 kV, the clearance must be increased by 4 inches for every 10 kV over 50 kV.

The clearance requirement may be reduced if:

- The vehicle is in transit with its structure lowered. The clearance may be reduced to 4 feet when near energized lines operating at less than 50 kV, or 4 ft. plus 4 inches for every 10 kV over 50 kV.
- Insulating barriers are installed to prevent contact with the lines and the barriers are rated for the voltage of the line being guarded. The barrier may not be part of an attachment to the vehicle or its raised structure. The clearance may be reduced to the distance allowed by the design of the insulating barrier.
- The equipment is an aerial lift insulated for the voltage involved and a qualified person performs the work. The clearance between the uninsulated portion of the lift and the power line may be reduced to the distance given in Table 3.

Persons working on the ground are not allowed to contact the vehicle or mechanical equipment or any of its attachments, unless:

- The person uses protective equipment rated for the voltage; or
- The equipment is located so that no uninsulated part of its structure can provide a conductive path to persons on the ground. Equipment shall not approach closer to the line than 10 feet for voltages less than 50 kV, or 10 feet plus 4 inches for every 10 kV over 50 kV.

When any vehicle or mechanical equipment is intentionally grounded, persons may not stand near the point of grounding when there is any possibility of contact with overhead energized lines. Additional precautions (e.g., such as the use of barricades or insulation) must be taken as necessary to protect persons from hazardous ground potentials that can develop within a few feet or more outward from the grounding point.

ILLUMINATION

Employees shall not enter spaces containing exposed energized parts unless there is sufficient illumination for them to perform the work safely.

Employees may not perform tasks near exposed energized parts where there is lack of illumination or an obstruction that blocks his or her view of the work to be performed. Do not reach blindly into areas that may contain energized parts.

CONFINED or ENCLOSED WORK SPACES

Employees working in manholes, vaults or similar confined or enclosed spaces that contain exposed energized parts must be provided with, and must use, protective shields, protective barriers, or insulating materials as needed to prevent inadvertent contact with these energized parts.

Doors and hinged panels that could swing into an employee and cause him or her to contact exposed energized parts must be secured before work begins.

Work performed within confined or enclosed spaces must comply with Commissions *Confined Space Entry Program*.

CONDUCTIVE MATERIALS and EQUIPMENT

Conductive materials and equipment that are in contact with any part of an employees' body must be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts.

If an employee must handle long conductive objects, such as metal ducts, pipes, or rods, in areas with exposed live parts, then insulation, guarding and/or approved materials handling techniques must be used which will minimize the hazard.

Portable Ladders. A portable ladder used where there is potential for contact with exposed energized parts must have nonconductive side rails.

Conductive Apparel. Employees may not wear conductive articles of jewelry and clothing, such as watchbands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear, if they might contact exposed energized parts.

HOUSEKEEPING

Housekeeping duties may not be performed close to live parts unless adequate safeguards, such as insulating equipment or barriers, are provided.

Electrically conductive cleaning materials, including steel wool, metalized cloth and silicon carbide, as well as conductive liquid solutions, may not be used near energized parts unless procedures are followed which prevent electrical contact.

INTERLOCKS

Only qualified persons are allowed to bypass electrical safety interlocks, and then only temporarily while he or she is working on the equipment. This work must comply with the specified procedures for working on or near exposed energized parts. The interlock system must be returned to its operable condition when the work is completed.

PORTABLE ELECTRICAL EQUIPMENT and EXTENSION cords

The following requirements apply to the use of cord-and-plug-connected equipment and flexible cord sets (extension cords):

- Extension cords may only be used to provide temporary power.
- Portable cord-and-plug connected equipment and extension cords must be visually inspected before use on any shift for external defects such as loose parts, deformed and missing pins, or damage to outer jacket or insulation, and for possible internal damage such as pinched or crushed outer jacket. Any defective cord or cord-and-plug-connected equipment shall be removed from service and no person may use it until it is repaired and tested to ensure it is safe for use.
- Extension cords must be of the three-wire type. Extension cords and flexible cords must be designed for hard or extra hard usage (for example, types S, ST, and SO). The rating or approval must be visible.

- Personnel performing work on renovation or construction sites using extension cords or where work is performed in damp or wet locations must be provided, and shall use, a ground-fault circuit interrupter (GFCI).
- Portable equipment must be handled in a manner that will not cause damage. Flexible electric cords connected to equipment may not be used for raising or lowering the equipment.
- Extension cords must be protected from damage. Sharp corners and projects must be avoided. Flexible cords may not be run through windows or doors unless protected from damage, and then only on a temporary basis. Flexible cords may not be run above ceilings or inside or through walls, ceilings or floors, and may not to be fastened with staples or otherwise hung in such a fashion as to damage the outer jacket or insulation.
- A cord protector or tape must cover cords when they extend into a walkway or other path of travel to avoid creating a trip hazard.
- Extension cords used with grounding-type equipment must contain an equipment-grounding conductor (i.e., the cord must accept a three-prong, or grounded, plug).
- Attachment plugs and receptacles may not be connected or altered in any way that would interrupt the continuity of the equipment-grounding conductor. Additionally, these devices may not be altered to allow the grounding pole to be inserted into current connector slots. Clipping the grounding prong from an electrical plug is prohibited.
- Flexible cords may only be plugged into grounded receptacles. The continuity of the ground in a two-prong outlet must be verified before use with a flexible cord, and it is recommended that the receptacle be replaced with a three-prong outlet. Adapters that interrupt the continuity of the equipment grounding connection may not be used.
- All portable electric equipment and flexible cords used in highly conductive work locations, such as those with water or other conductive liquids, or in places where employees are likely to contact water or conductive liquids, must be approved for those locations.
- Employee's hands must not be wet when plugging and unplugging flexible cords and cord-and-plug-connected equipment if energized equipment is involved.
- If the connection could provide a conducting path to employee's hands (for example, if a cord connector is wet from being immersed in water), the energized plug and receptacle connections must be handled only with insulating protective equipment.
- Locking-type connectors must be properly locked into the connector.
- Lamps for general illumination must be protected from breakage with a protective cage and metal shell sockets must be grounded.
- Temporary light must be protected from breakage using a protective cage.
- Temporary lights must not be suspended by their cords unless they have been designed for this purpose.
- Portable lighting used in wet or conductive locations, such as tanks or boilers, must be operated at no more than 12 volts or must be protected by GFCI's.
- Extension cords are considered to be temporary wiring, and must also comply with the section on "Requirements for Temporary Wiring" in this Directive.

ELECTRIC POWER and LIGHTING CIRCUITS

Routine Opening and Closing of Circuits - Load rated switches, circuit breakers, or other devices specifically designed as disconnecting means must be used for the opening, reversing, or closing of circuits under load conditions. Cable connectors not of the load-break type, fuses, terminal lugs, and cable splice connections may not be used for opening, reversing, or closing circuits under load conditions except in an emergency.

Re-closing Circuits After a Protective Device Operates - After a circuit is de-energized by a circuit protective device (e.g., circuit breaker or similar), the circuit may not be manually re-energized until it has been determined that the equipment and circuit can be safely energized. The repetitive manual re-closing of circuit breakers or re-energizing circuits by replacing fuses without verifying that the circuit can be safely energized is prohibited.

When it can be determined that the overcurrent device operated because of an overload rather than a fault condition, no examination of the circuit or connected equipment is needed before the circuit is re-energized.

Overcurrent protection of circuits and conductors may not be modified even on a temporary basis.

TEST EQUIPMENT and INSTRUMENTS

Only qualified persons may perform testing work on electric circuits or equipment. Test instruments and equipment (including all associated test leads, cables, power cords, probes and connectors) must be visually inspected for external defects and damage before the equipment is used. If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item must be tagged out of service. The device may not be returned to service until it has been repaired and tested safe for use.

Test instruments, equipment, and their accessories must be rated for the circuits and equipment to which they will be connected and designed for the environment in which they will be used.

FLAMMABLE or IGNITABLE MATERIALS

Where flammable or ignitable materials are present, do not use electric equipment capable of igniting them unless measures are taken to prevent hazardous conditions from developing. Flammable and ignitable materials include, but are not limited to, flammable gases, vapors, or liquids, combustible dust, and ignitable fibers or filings. Equipment that is intrinsically safe for the hazardous condition may be used.

SAFEGUARDS for PERSONNEL PROTECTION

Protective Equipment

Employees working in areas where there are potential electrical hazards must be provided with, and must use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed. The department must provide electrical safety-related personal protective equipment required by this program at no cost to the employee. The requirements for general purpose gloves, respirators, hearing protection, fall protection, and electrical protective headwear and footwear may be found in the Commissions *Personal Protective Equipment Directive*; a copy of this Directive may be obtained from the Risk Management and Safety Office.

Workmanship and Finish: Rubber insulating equipment must meet the American Society of Testing and Materials (ASTM) standards D120-87, D178-93, D1048-93, D1049-93, D1050-90 or D1051-87 as applicable. Manufactured equipment, which does not indicate compliance with these ASTM standards, must be tested using the a-c and d-c proof tests and related procedures as described in these ASTM standards.

Blankets, gloves and sleeves must be produced by a seamless process. Insulating blankets, matting, covers, lines, hoses, gloves, and sleeves made of rubber must be marked to indicate the class of equipment (e.g., Class 0 equipment must be marked Class 0, Class 1 marked Class 1, and so forth). Non-ozone-resistant equipment other than matting must be marked Type I. Ozone-resistant equipment other than matting shall be marked Type II. Markings must be nonconductive and must be applied in a way that will not damage the insulating qualities. Markings on gloves must be confined to the cuff portion of the glove.

Equipment must be free of harmful physical irregularities. Surface irregularities (e.g., indentions, protuberances, or imbedded foreign materials) may be present on rubber goods because of imperfections on forms or molds or because of manufacturing difficulties. These surface irregularities are acceptable under the following conditions:

- The indentation or part that sticks out blends into a smooth slope when the material is stretched, or
- The foreign material remains in place when the insulating material is folded and stretches with the insulating material surrounding it.

In-service care and use: The department must make certain that electrical protective equipment is maintained in a safe, reliable condition, and that the following requirements are met:

Maximum use voltages for rubber protective equipment must conform to those listed in Table 4.

TABLE 4

RUBBER INSULATING EQUIPMENT, MAXIMUM USE VOLTAGE

Class of Equipment	Maximum use voltage¹ a-c --rms
0	1,000
1	7,500
2	17,000
3	26,500
4	36,000

¹ The maximum use voltage is the ac voltage (rms) classification of the protective equipment that designates the maximum nominal voltage of the energized system that may be safely worked. The nominal design voltage is equal to the phase-to-phase voltage on multiphase circuits. However, the phase-to-ground potential is considered to be the nominal design voltage:

- ⇒ If there is no multiphase exposure in a system area and if the voltage is limited to the phase-to-ground potential, or
- ⇒ If the electrical equipment and devices are insulated or isolated or both so that the multiphase exposure on a grounded wire circuit is removed.

- Insulating equipment shall be inspected for damage before each day's use and immediately following any incident that could have caused damage.
- An air test must be performed on rubber insulating gloves before use.
- Insulating equipment with a hole, tear, puncture or cut, ozone cutting or checking, an embedded foreign object, any change in texture including swelling, softening, hardening, or becoming sticky or inelastic, or any other defect that could damage the insulating property shall not be used.
- All protective equipment must be used and maintained in accordance with the manufacturers instructions.
 - Insulating equipment found to have defects that might affect its insulating properties must be removed from service until electrical tests have been performed that indicate it is acceptable for continued use.
 - Where the insulating capability of protective equipment is subject to damage during use, an outer covering of leather or other appropriate material shall protect the insulating material.
 - Rubber insulating equipment shall be tested on a schedule as shown in Table 5.

TABLE 5

RUBBER INSULATING EQUIPMENT TEST INTERVALS

Type of Equipment	When to Test
Rubber insulating line hose	Upon indication that the insulating value is suspect
Rubber insulating covers	Upon indication that insulating value is suspect
Rubber insulating blankets	Before first issue and every 12 months thereafter
Rubber insulating gloves	Before first issue and every 6 months thereafter
Rubber insulating sleeves	Before first issue and every 12 months thereafter

If the insulating equipment has been electrically tested but not issued for service, it may not be placed into service unless it has been electrically tested within the previous 12 months.

Employees shall clean insulating equipment as needed to remove foreign substances, and to store insulating equipment where it is protected from light, temperature extremes, excessive humidity, ozone, and other substances and conditions that may cause damage. Employees shall visually examine their gloves prior to each use and to avoid handling sharp objects.

Protector gloves must be worn over insulating gloves except as follows:

- Protector gloves need not be used with Class 0 gloves, under limited-use conditions, where small equipment and parts manipulation require unusually high finger dexterity.
- Any other class of glove may be used for similar work without protector gloves if it is demonstrated that the possibility of physical damage to the gloves is small and if the class of glove is one class higher than that required for the voltage involved. Insulating gloves that have been used without protector gloves may not be used at a higher voltage until they have been electrically tested.

The department must ensure that employees do not use insulating equipment that fails to pass visual inspections or electrical tests except as follows:

- Rubber insulating line hose may be used in shorter lengths if the defective portion is cut off.
- Rubber insulating blankets may be repaired with a compatible patch as long as the physical and electrical properties equal or exceed those of the blanket.
- Rubber insulated blankets may be salvaged by cutting and removing the defective area from the undamaged portion of the blanket if the undamaged area remaining is greater than 22 inches by 22 inches for Class 1, 2, 3 and 4 blankets.
- Rubber insulating gloves and sleeves with minor physical defects, such as small cuts, tears or punctures may be repaired by application of a patch with the same electrical and physical properties as the surrounding material.
- Rubber insulating gloves and sleeves with minor surface blemishes may be repaired with a compatible liquid compound.
- Repairs to gloves are permitted only in the area between the wrist and reinforced edge of the opening.

Repaired insulating equipment must be retested before it may be returned to service. These tests must be documented in writing, and indicate the type(s) of test(s) performed, equipment tested (specifically by referencing an applied marking, serial number or similar), date, name of tester, and the results of the tests. These test results must be maintained in a permanent log.

GENERAL PROTECTIVE EQUIPMENT and TOOLS

Nonconductive head protection shall be worn whenever there is danger of head injury from electric shock or burn due to contact with exposed energized parts.

Protective equipment for the eyes and/or face shall be worn whenever there is danger of injury to the eyes or face from electric arcs, flashes or flying objects resulting from electrical explosion.

Employees working near exposed energized conductors or circuit parts if the tools or handling equipment might make contact with such conductors or parts shall use insulated tools or handling equipment.

If the insulating capability of insulated tools or handling equipment is subject to damage, the insulating material shall be protected.

Protective shields, protective barriers, or insulating materials shall be used to protect each employee from shock, burns, or other electrically related injuries while employees are working near exposed energized parts which might be accidentally contacted or where dangerous electric heating or arcing might occur.

When normally enclosed live parts are exposed for maintenance or repair, they are to be guarded to protect unqualified persons from contact with the live parts.

Fuse handling equipment, insulated for the circuit voltage, shall be used to remove or install fuses when the fuse terminals are energized.

Ropes and hand lines used near exposed energized parts shall be nonconductive.

ALERTING TECHNIQUES

The following alerting techniques shall be used to warn and protect employees from electrical shock hazards, burns, or failure of electric equipment parts.

- **Safety Signs and Tags** - Safety signs, safety symbols, or accident prevention tags shall be used where necessary to warn employees about electrical hazards that may endanger them.
- **Barricades** – Barricades are used in conjunction with safety signs where necessary to prevent or limit employee access to work areas exposing employees to uninsulated energized conductors or circuit parts. Conductive barricades may not be used where they might cause an electrical contact hazard.
- **Attendants** - If signs and barricades do not provide sufficient warning from electrical hazards, an attendant is to be stationed to warn and protect employees.

FIRST AID and CARDIOPULMONARY RESUSCITATION (CPR) REQUIREMENTS

Employees performing work on, or associated with, exposed lines or equipment energized at 50 volts or more shall be trained in first aid and CPR.

OTHER SAFETY HAZARDS

Employees performing work in and around campus buildings may be exposed to other hazards not covered by this program. These include, but are not limited to:

- **Fall Hazards.** Employees that work in elevated locations where there is exposure to an unguarded fall hazard of 6 feet or greater must be provided and use fall protection equipment and must be trained to use this equipment properly. Employees that perform work exposed to fall hazards of 6 feet or greater must be trained to perform this work safely and must comply with the requirements of the Commissions *Fall Protection Directive*.
- **Confined or Enclosed Spaces.** A confined or enclosed space is a space that is large enough for an employee to enter and perform work, that has limited or restricted means for entry or exit, and that is not intended for continuous employee occupancy. Examples include, but are not limited to, sewers, silos, tanks, boilers, tunnels, vaults and manholes. Employees that perform work in confined or enclosed spaces must be trained to perform this work safely and must comply with the requirements of the Commissions *Confined Space Entry Directive*.
- **Hazardous Materials.** If you use or work around chemicals or other hazardous materials, you must be trained on how to read and interpret the Material Safety Data Sheet (MSDS) for the material. You must also be informed of how to gain access to MSDS's, how to safely handle and store these materials, and you must comply with the requirements of the Commissions *Hazard Communication Directive*.
- **Hot Work Operations.** Abrasive grinding, welding, cutting and brazing, torch cutting and similar hot work operations are required to be permitted if performed outside of an approved hot work area. Permits and additional information may be obtained from the Risk Management and Safety Office.

Lockout/Tagout. Work conducted around other types of energized systems (for example, pneumatic, pressurized, spring-actuated and similar) must be addressed using approved lockout/tagout procedures and must comply with the Commissions *Lockout/Tagout Directive*.

Asbestos and Lead Materials. Asbestos is commonly found in mechanical rooms and spaces, and may be present in pipe insulation, ceiling tile, plasters, flooring and electric wire insulation. Lead is commonly found in older paints and coatings. Both materials are potentially serious health hazards. It is a Commission requirement, therefore, that all maintenance and renovation work that impacts building components, the Risk Management and Safety Office must review systems or equipment or authorized departmental representative before the work is performed to determine if asbestos or lead materials are present.

Work associated with electric power generation, transmission and distribution systems.

Training and additional information on the above Directive may be obtained through the Risk Management and Safety Office.

SECTION 5.06 Excavation and Trenching

The Commission has implemented this Directive to ensure the safety of employees involved in excavation work as part of their job duties. The Commission complies with Title 29 Code of Federal Regulations (CFR) §1926 Subpart P, Excavations.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to ensure that every employee involved in excavation work is protected against foreseeable associated hazards.

APPLICABILITY

The Directive applies to all Commission employees involved in excavation work as part of their assigned work duties.

DEFINITIONS

General Definitions

Approved means, for the purpose of this section, authorized by the Commission, tested and certified by the manufacturer or any recognized national testing laboratory to possess the strength requirements specified in this section.

Competent Person means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

Construction Work means work for construction, alteration, and/or repair to new underground utilities.

Defect means any characteristic or condition that tends to weaken or reduce the strength of the tool, object, or structure of which it is a part.

Employee means every worker regardless of title or contractual relationship.

Service Work means work for alteration and/or repair of existing underground utilities.

Work Area means that portion of a walking/working surface where work activities are being performed.

GENERAL EXCAVATION DEFINITIONS

Aluminum Hydraulic Shoring means a pre-engineered shoring system comprised of aluminum hydraulic cylinders (crossbraces) used in conjunction with vertical rails (uprights) or horizontal rails (wales). Such system is designed specifically to support the sidewalls of an excavation and prevent cave-ins.

Benching (Benching system) means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

Cave-in means the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

Cross braces mean the horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends of which bear against either uprights or wales.

Distress means that the soil is in a condition where a cave-in is imminent or is likely to occur. Distress is evidenced by such phenomena as the development of fissures in the face of or adjacent to an open excavation; the subsidence of the edge of an excavation; the slumping of material from the face or the bulging or heaving of material from the bottom of an excavation; the spalling of material from the face of an excavation; and raveling (i.e., small amounts of material such as pebbles or little clumps of material suddenly separating from the face of an excavation and trickling or rolling down into the excavation).

Excavation means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Faces or sides means the vertical or inclined earth surfaces formed as a result of excavation work.

Failure means the breakage, displacement, or permanent deformation of a structural member or connection so as to reduce its structural integrity and its supportive capabilities.

Hazardous atmosphere means an atmosphere, which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause, death, illness, or injury.

Kickout means the accidental release or failure of a cross brace.

Maximum allowable slope means the steepest incline of an excavation face that is acceptable for the most favorable site conditions as protection against cave-ins, and is expressed as the ratio of horizontal distance to vertical rise (H:V).

Protective system means a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp means an inclined walking or working surface that is used to gain access to one point from another, and is constructed from earth or from structural materials such as steel or wood.

Registered Professional Engineer means a person who is registered as a professional engineer in the state where the work is to be performed.

Sheeting means the members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield (Shield system) means a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either pre-manufactured or job-built in accordance with this manual section. Shields used in trenches are usually referred to as "trench boxes" or "trench shields."

Shoring (Shoring system) means a structure such as a metal hydraulic or mechanical shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.

Short term exposure means a period of time less than or equal to 24 hours that an excavation is open.

Sides. See **Faces**.

Sloping (Sloping system) means a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

Stable rock means natural solid mineral material (not soil) that can be excavated with vertical sides and will remain intact while exposed.

Structural ramp means a ramp built of steel or wood, usually used for vehicle access.

Support system means a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

Trench (trench excavation) means a narrow excavation (in relation to its length) made below the surface of the ground.

Trench box or trench shield. See **Shield**.

Uprights means the vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called "sheeting."

Underground Installations means utility installations, such as sewer, telephone, fuel, electric, water lines, fiber optic, etc.

Wales means horizontal members of a shoring system placed parallel to the excavation face whose sides bear against the vertical members of the shoring system or earth.

SOIL DEFINITIONS

Cemented soil means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

Cohesive soil means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and

exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.

Dry soil means soil that does not exhibit visible signs of moisture content.

Fissured means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

Granular soil means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

Layered system means two or more distinctly different soil or rock types arranged in layers.

Moist soil means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.

Plastic means a property of a soil, which allows the soil to be deformed or molded without cracking, or appreciable volume change.

Saturated soil means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or shear vane.

Soil classification system means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.

Stable rock means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

Submerged soil means soil, which is underwater or is free seeping.

SOIL TYPES

Type A means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if any of the following are noted:

The soil is fissured; or

The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or

The soil has been previously disturbed; or

The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or

The material is subject to other factors that would require it to be classified as a less stable material.

Type B means cohesive soil with an unconfined compressive strength greater than 0.5 tsf but less than 1.5 tsf; or

Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.

- Previously disturbed soils except those, which would otherwise be classed as Type C soil.
- Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
- Dry rock that is not stable; or
- Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

Type C means cohesive soil with an unconfined compressive strength of 0.5 tsf (48kPa) or less; or

Granular soils including gravel, sand, and loamy sand; or

Submerged soil or soil from which water is freely seeping; or

Submerged rock that is not stable, or

Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.

Unconfined compressive strength means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.

Wet soil means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

REQUIREMENTS

Risk Assessment and Job Safety Analysis (JSA)

A Competent Person shall conduct a JSA prior to excavation work activities beginning to assess the identifiable hazards associated with work areas, occupations, and tasks.

The risk assessment also includes notifying Miss Utility prior to starting the excavation. Miss Utility shall be provided the opportunity to respond to the work site to mark all utilities. **Before You Dig – Call Miss Utility 1-800-257-7777 it's the law.**

Written Work Plan (> 5 Ft. in depth)

A Competent Person shall develop a written work plan for every excavation exceeding five feet in depth based on the JSA and the other requirements of this section.

The written Excavation Work Safety Plan shall include:

- Identification of all hazards in the work area related to excavation equipment
- Describe the excavation protection system(s) to be provided
- Describe the soil type and the correct procedures for the selection, fit, use and maintenance of the excavation protection system
- Describe procedures for excavation
- Describe the method for prompt, safe removal of injured workers
- Be available on the job site
- Signature of the Competent Person

TRAINING

Training shall be provided to employees who will be engaged in excavation work, prior to being tasked to carry out any excavation and or trenching assignment. Hazard recognition and excavation protective systems shall be included in the training.

Site-specific training shall occur before the start of excavation work activities, including hazards and controls noted in the JHA and the other provisions of the written plan.

INSPECTIONS

When employee exposure in an excavation is reasonably anticipated, an inspection shall be conducted by a Competent Person:

- Prior to the start of work each day
- As needed throughout the shift
- After every rainstorm
- When an unusual occurrence affects the integrity of the excavation

Note: Where the Competent Person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

PERSONAL PROTECTIVE EQUIPMENT

Minimum Personal Protective Equipment shall consist of:

- Approved Hardhats
- Approved Safety Glasses
- Approved Safety-toe Boots

- If exposed to vehicular traffic, employees shall be provided with, and shall wear, a high visibility class II vests or other suitable apparel that meets class II requirements. (Apparel shall be reflective if working in dim light or at night)

SPECIFIC ENGINEERING CONTROL OPITONS

Requiring Registered Professional Engineer

Excavation protection system configurations requiring development by a Registered Professional Engineer:

- Excavations greater than twenty (20) feet in depth
- Any excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees
- Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations

Designs shall be in written form and will include at least the following:

- The protective system configurations that were determined to be safe for the particular project
- The identity and stamped seal of the Registered Professional Engineer approving the design

At least one copy of the design shall be maintained at the jobsite.

SLOPING and BENCHING SYSTEMS (excavation depth > five feet., < twenty feet.)

Classifying Soil

Soil and rock deposits shall be classified in accordance with Classifying Soil portion of this program.

Maximum allowable slope

The maximum allowable slope for a soil or rock deposit shall be determined from **Table A** of this program.

When additional weight loads to the system are present from stored material or equipment, operating equipment, or traffic, a Competent Person shall determine the degree to which the slope must be reduced below the maximum allowable slope, and will assure that such reduction is achieved.

PROHIBITION

Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.

SHIELDING SYSTEMS (excavation depth > five feet., < twenty feet.)

General

Installation of a support system shall be closely coordinated with the excavation of trenches. Shield systems shall not be subjected to loads exceeding those, which the system was designed to withstand. Employees shall not be allowed in shield systems when shields are being installed, removed, or moved vertically.

Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields. **This means that the access and egress methods shall be included from within the protection of the shielding system.**

Excavation of material to a level no greater than 2 feet below the bottom of the members of a shield system shall be permitted.

Materials and equipment

Materials and equipment used for protective systems shall be free from damage or defects that might impair their proper function.

Manufactured materials and equipment used for protective systems shall be used and maintained in a manner that is consistent with the recommendations of the manufacturer.

When material or equipment that is used for protective systems is damaged, a Competent Person shall examine the material or equipment and evaluate its suitability for continued use. If the Competent Person cannot assure the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service. Manufactured material or equipment, in this case, shall be evaluated and approved by the manufacturer or a Registered Professional Engineer before being returned to service.

Designs for shoring in trenches shall be determined in accordance with the conditions and requirements set forth in the Soil Classification section, along with the Aluminum Hydraulic Shoring Table (B-1) of this program. Other manufactured shoring systems that meet or exceed these tables are permitted.

Note: Aluminum Hydraulic Shoring is preferred to Timber Shoring. However, if Timber Shoring is more feasible or practical, it shall be utilized in accordance with OSHA CFR 29 1926 Subpart P, Appendix C.

Combination Systems (excavation depth > five feet., < twenty feet.)

If the excavation is of a depth whereby the shielding/shoring system is not of sufficient height, sloping/benching shall be utilized in combination with shielding/shoring.

Installation and removal of support

Members of support systems shall be securely connected together to prevent sliding, falling, kickouts, or other predictable failure.

Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

Individual members of support systems shall not be subjected to loads exceeding those, which those members were designed to withstand.

Before temporary removal of individual members begins, additional precautions shall be taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system.

Removal shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly, so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation.

Backfilling shall progress together with the removal of support systems from excavations.

SPECIFIC EXCAVATION HAZARD CONTROLS

Access and egress

A Competent Person shall design structural ramps that are used solely by employees, as a means of access or egress from excavations.

Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent displacement.

Structural members used for ramps and runways shall be of uniform thickness.

Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.

Structural ramps used in lieu of steps shall be provided with cleats or other surface treatment on the top surface to prevent slipping.

A means of egress from trench excavations shall always be maintained. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees.

Employees shall not utilize mechanical equipment to access or egress from trench excavations.

EXPOSURE TO FALLING LOADS

Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

Whether inside or outside of an excavation, no employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.

Operators of such vehicles being loaded or unloaded are required to remain out of the cabs of vehicles during loading or unloading.

HAZARDOUS ATMOSPHERES

Where oxygen deficient atmospheres (containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or in areas where hazardous substances are stored nearby, the atmosphere shall be tested before employees enter. Continuous atmospheric testing shall be done in excavations with the potential to contain hazardous atmospheres, to ensure the safety and health of employees entering and working.

See the Confined Space Entry section in this manual.

MOBILE EQUIPMENT

When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs.

UNDERGROUND INSTALLATIONS

Before You Dig – Call Miss Utility 1-800-257-7777 it's the law.

Utility companies or owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of underground utility installations, prior to the start of excavation activities. When utility companies or owners cannot respond to a request to locate underground utilities within 48 hours (unless a longer period is required by state or local law), or cannot establish the exact location of these installations, the work may proceed, provided the employees do so with caution, and utilize detection equipment or other acceptable means to locate existing utility installations.

When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by safe and acceptable means, (i.e. hand digging/vacuum excavation within 18" of utility line marks).

While the excavation is open, underground installations shall be protected, supported or removed as necessary to safeguard employees.

WATER ACCUMULATION

Employees shall not work in excavations in which water has accumulated, or is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions necessary to protect employees include special support or shield systems to protect from cave-ins and/or water removal to control the level of accumulating water.

If water is controlled or prevented from accumulating by the use of water removal equipment, such equipment and operations shall be monitored by a Competent Person to ensure proper operation.

If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation.

PROTECTION of EMPLOYEES FROM LOOSE ROCK, SOIL, EQUIPMENT and MATERIALS

Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection can consist of:

- Scaling to remove loose material
- Installation of protective barricades at intervals as necessary on the face to stop and contain falling material
- Or other means that provides equivalent protection

Such rock, soil and materials and equipment shall additionally be kept at least 2 feet from the edge of excavations.

FALL PROTECTION

See the Fall Protection section in this manual.

CLASSIFYING SOILS

Classification of soil and rock deposits

Each soil and rock deposit shall be classified by a Competent Person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions within this section.

The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a Competent Person using tests described within this section.

In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, a Competent Person shall evaluate the changes. The deposit shall be reclassified as necessary to reflect the changed circumstances.

ACCEPTABLE VISUAL and MANUAL TESTS

Visual tests

Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.

Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil fall off a vertical side, the soil could be fissured. Small falls are evidence of moving ground and are indications of potentially hazardous situations.

Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.

Observe the opened side of the excavation to identify layered systems.

Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

MANUAL TESTS

Plasticity

Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter for a length of at least 2 inches. Cohesive material can be successfully rolled into threads without crumbling.

Dry strength

If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps that break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered un-fissured.

Thumb penetration

The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure.

This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences.

If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.

Other strength tests

Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated sheervane.

Drying test

The basic purpose of the drying test is to differentiate between cohesive material with fissures, un-fissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches in diameter until it is thoroughly dry, then:

- If the sample develops cracks as it dries, significant fissures are indicated
- Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an un-fissured cohesive material and the unconfined compressive strength should be determined
- If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular

Notifying Miss Utility Procedures

Please ensure that all supervisors read and understand that they are obligated to follow these Directives.

In accordance with state and county mandates, anyone planning any type of sub-surface work must contact underground line owners. Sub-surface work is defined as the breaking of the surface of the ground. Such sub-surface activities may include, but are not limited to, digging, excavating, boring, pile driving, and blasting. Miss Utility is a free, computerized information service that was created to assist in following the mandates requiring notification to underground line owners.

When any of our work programs require sub-surface work or the breaking of the ground, supervisors are **required** to contact Miss Utility to have underground utility lines located and marked if necessary. Miss Utility should be contacted at least forty-eight (48) hours prior to any sub-surface work to be performed. In emergency situations or after normal operating hours, Miss Utility should be contacted one hour prior to the start of work. After Miss Utility is contacted, the information on the work area is delivered to appropriate utility companies. When calling during normal operating hours, Miss Utility indicates that there should be a response within forty-eight (48) hours if the sub-surface work will affect any utility lines.

Supervisors are responsible for compliance with the jurisdictional mandates, by simply contacting Miss Utility. Failure to comply may result in disciplinary action, and substantial fines/costly repair expenses for the Commission. The following page outlines the procedures for contacting Miss Utility.

Procedures for Calling Miss Utility

(The following information is from the Miss Utility brochure.)

Phone Numbers: **All areas: 811.** Or 1-800-257-7777; Washington, D.C. local (202) 265-7177;
Online: www.missutility.net

Normal Operating Hours

- 7:00 am – 5:00 pm, Monday-Friday
- **Call at least 48 hours in advance prior to work, excluding weekends and holidays.** (to ensure timely processing, requests should be made up to 7 days in advance)

After Hours (Emergency Locates)

- 5:00 pm – 7:00 am, Monday-Friday
- Saturdays, Sundays, and Holidays – 24 hours
- **For emergencies, call approximately 90 minutes prior to start of work. The crew should be on site or en route.**

Answers to be provided when calling (present all information in this order):

1. Caller I.D. – If no I.D., then see items 2-6.
2. Daytime telephone no.
3. Person calling (first and last)
4. Company (M-NCPPC)
5. Company address
6. Alternate contact name
7. Alternate contact telephone no.
8. Work to begin date (only if other than 48 hours notice)
9. Will explosives be used? (yes or no)
10. Type of work being done
11. Who the work is being done for
12. State
13. County
14. City/Place
15. Address
16. Nearest intersecting street
17. Work location: descriptive information for locating
 - (a) Distance
 - (b) Direction
 - (c) Which side of the street
 - (d) Subdivision or area

Example: Locate East from Maple Ave. on North side of Main St. for approximately 200 yards to Pole -000
18. Remarks (special instructions)
19. Page and Grid (from Alexandria Drafting Company map book – if have available)

Any questions should be directed to the Risk Management and Safety Office at (301) 454-1699 or 1682.

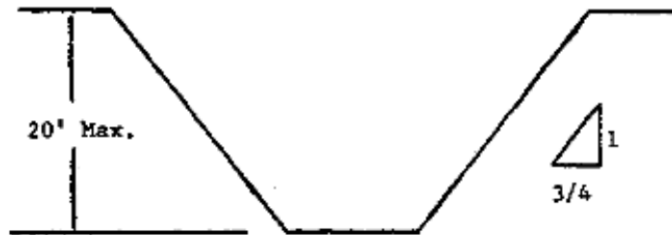
TABLE A-1 MAXIMUM ALLOWABLE SLOPES

SOIL OR ROCK TYPE		MAXIMUM ALLOWABLE SLOPES FOR EXCAVATIONS LESS THAN 20 FEET DEEP
STABLE ROCK	i m p l e	VERTICAL (90 Degrees from the horizontal)
TYPE A		$\frac{3}{4}$ to 1 (approximately 53 Degrees from the horizontal)
TYPE B		1 to 1 (45 Degrees from the horizontal)
TYPE C		$1 \frac{1}{2}$ to 1 (approximately 34 Degrees from the horizontal)

S

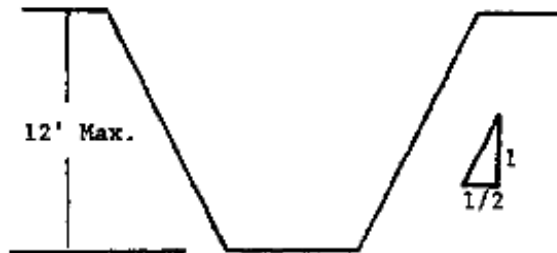
Slopes Made In Type A Soil:

All simple slope excavation 20 feet or less in depth will have a maximum allowable slope of $\frac{3}{4}$ to 1.



SIMPLE SLOPE (<24 hours open)

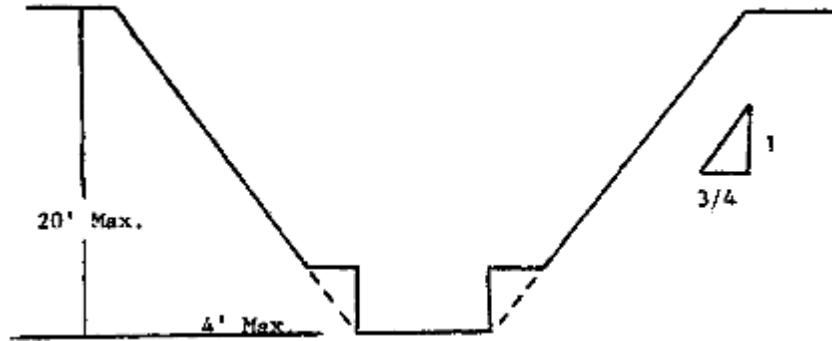
Exception: Simple slope excavations which are open 24 hours or less (**short term**) and which are 12 feet or less in depth will have a maximum allowable slope of $\frac{1}{2}$ to 1.



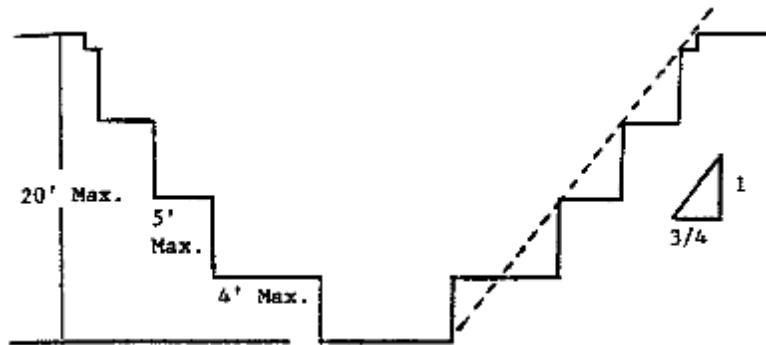
SIMPLE SLOPE - < 24 hours open

Benched Excavations Made In Type A Soil

All benched excavations 20 feet or less in depth will have a maximum allowable slope of $\frac{3}{4}$ to 1 and maximum bench dimensions as follows:



SIMPLE BENCH



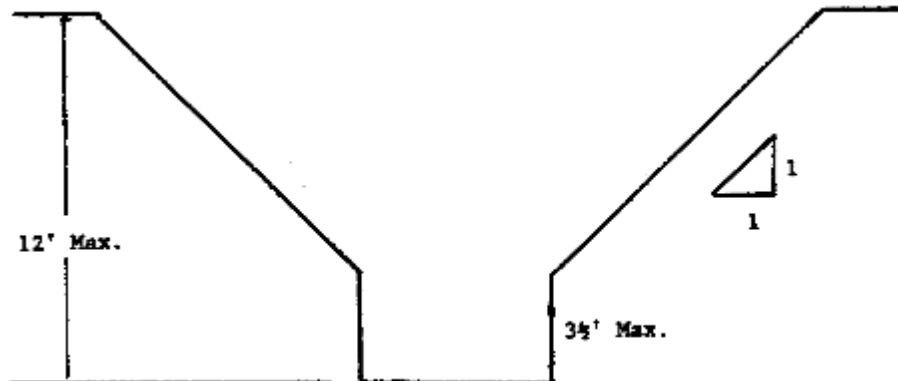
MULTIPLE BENCH

Unsupported Vertically Sided Lower Portion Made In Type A Soil

All excavations 8 feet or less in depth which have unsupported vertically sided lower portions will have a maximum vertical side of 3 1/2 feet, with the remaining upper vertical sides sloped at 3/4 to 1.

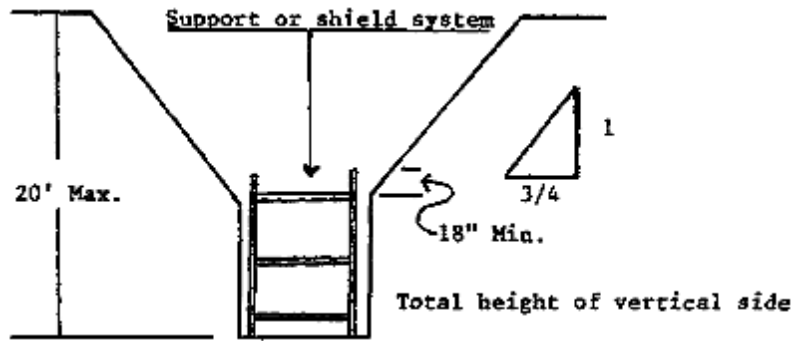


All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions will have a maximum allowable slope of 1 to 1 and a maximum vertical side of 3 1/2 feet.



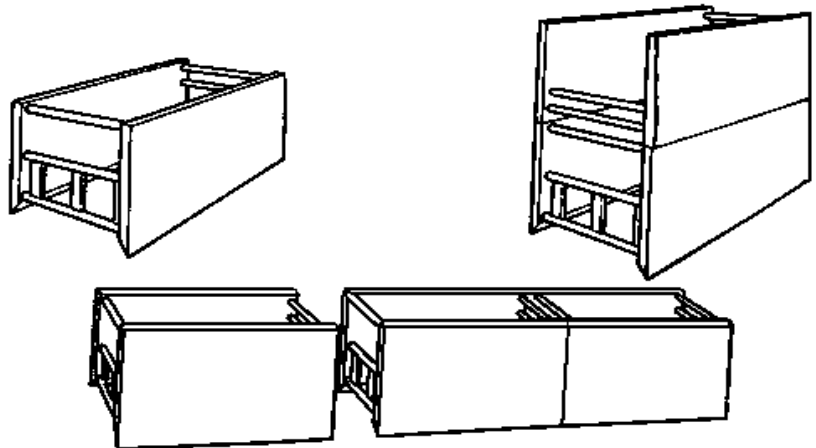
Supported Or Shielded (Vertically Sided Lower Portion) Made In Type A Soil

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded will have a maximum allowable slope of $\frac{3}{4}$ to 1. The support or shield system must extend at least 18 inches above the top of the vertical side.



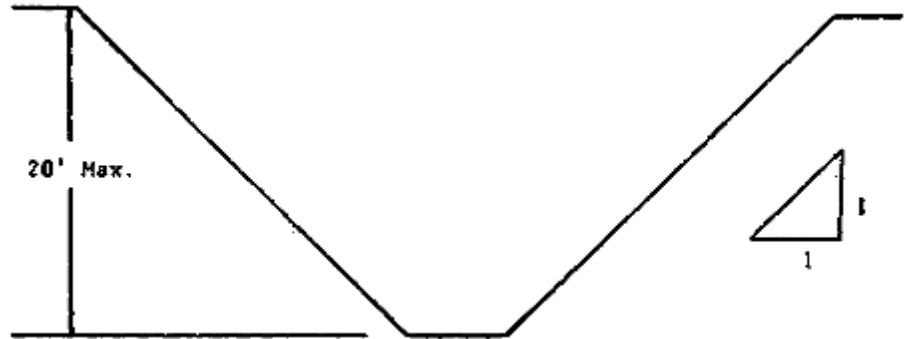
SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION

Trench Shield (Trench Box) Configurations



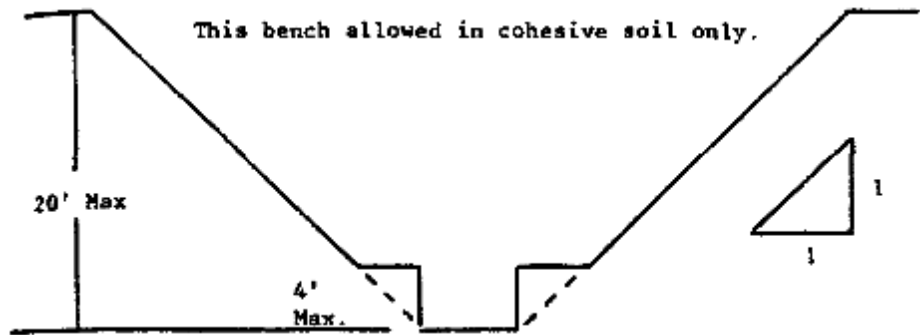
Simple Slopes Made In Type B Soil

All simple slope excavations 20 feet or less in depth will have a maximum allowable slope of 1 to 1.

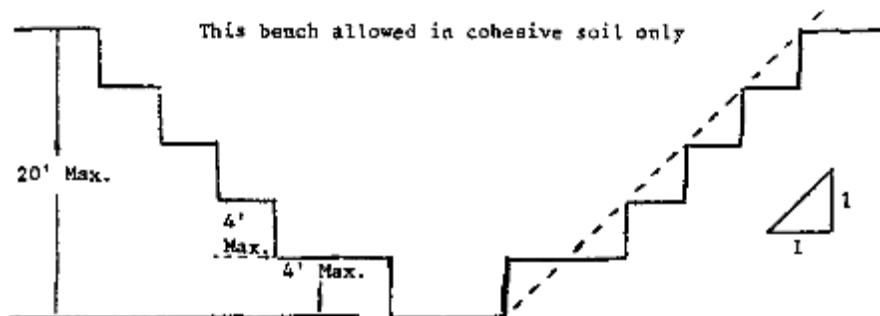


Benched Excavations Made In Type B Soil

All benched excavations 20 feet or less in depth will have a maximum allowable slope of 1 to 1 and maximum bench dimensions as follows (but only in cohesive soil):



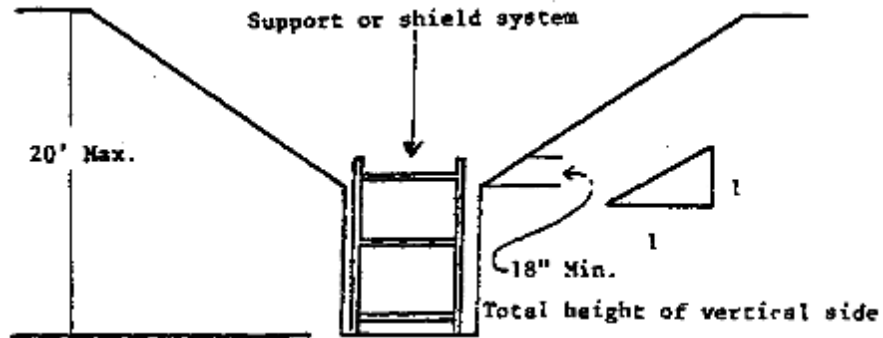
SINGLE BENCH



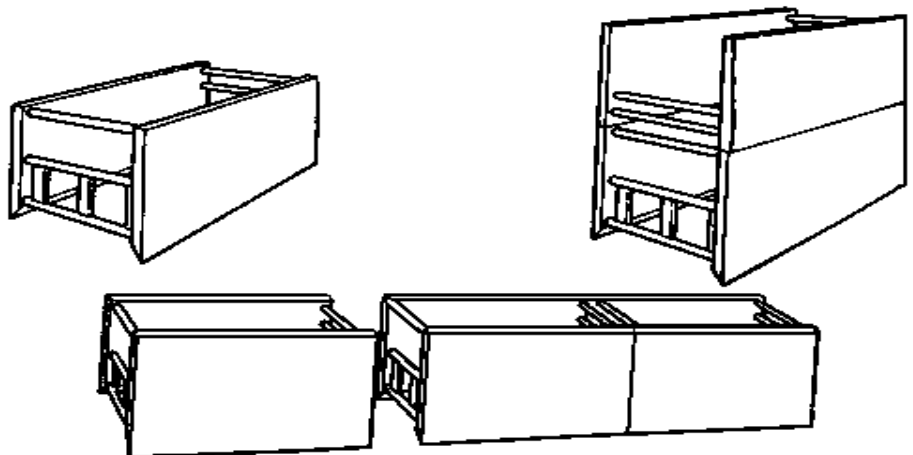
MULTIPLE BENCH

Vertically Sided Lower Portion Made In Type B Soil

All excavations 20 feet or less in depth which have vertically sided lower portions will be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations will have a maximum allowable slope of 1 to 1.



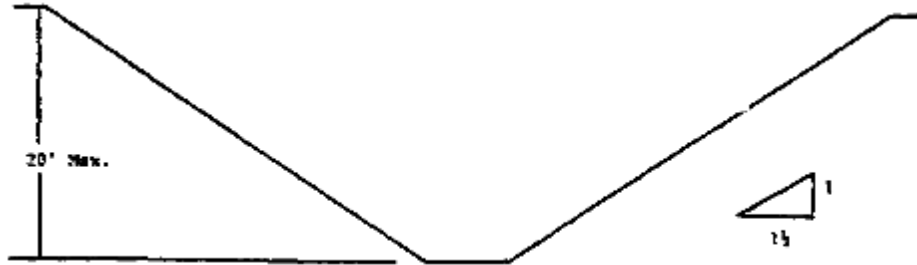
Trench Shield (Trench Box) Configurations



Excavations made in Type C soil.

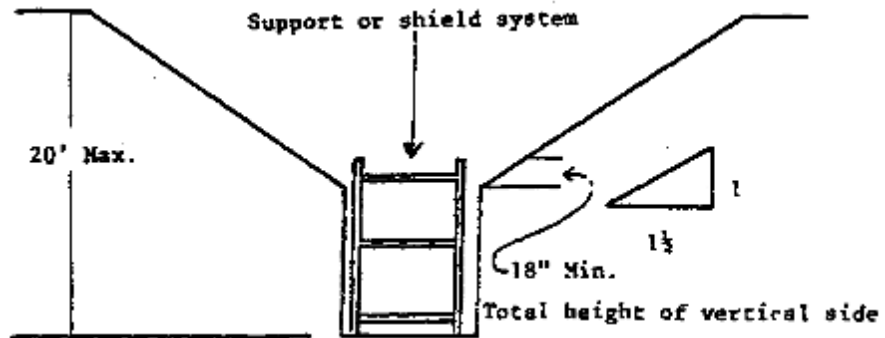
Simple Slope Made In Type C Soil

All simple slope excavations 20 feet to/including 4 feet in depth will have a maximum allowable slope of 1 ½ to 1.

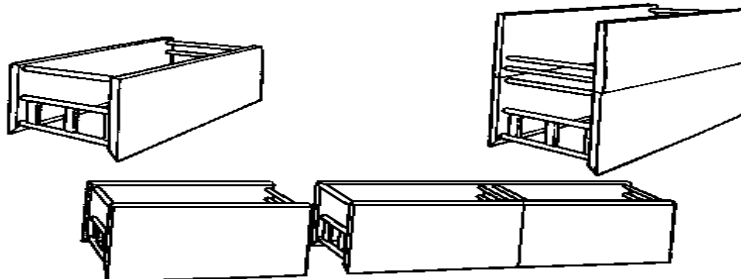


SIMPLE SLOPE

All excavations 20 feet or less in depth which have vertically sided lower portions will be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations will have a maximum allowable slope of 1 ½ to 1.



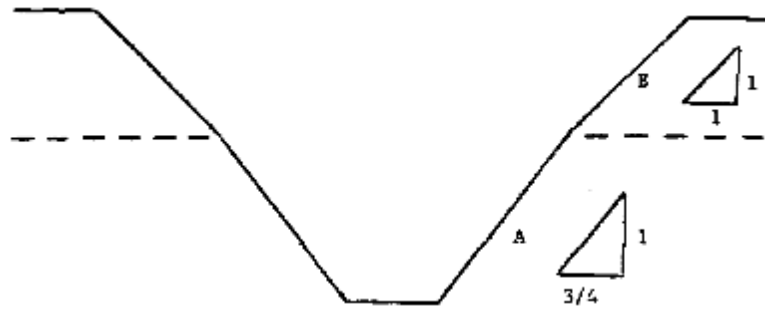
Trench Shield (Trench Box) Configurations



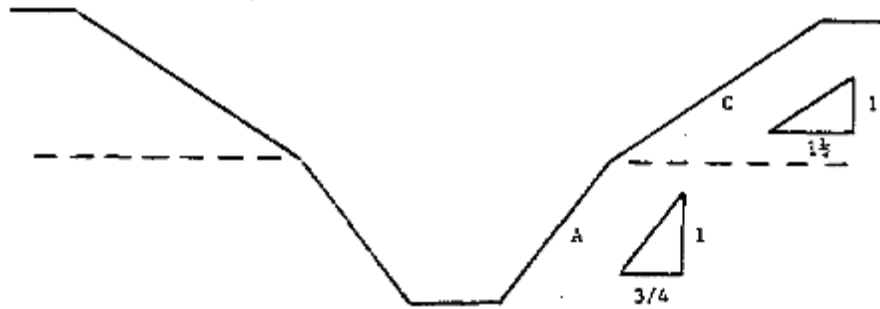
Excavations made in Type layered soils.

Sloped Excavations Made In Layered Soils.

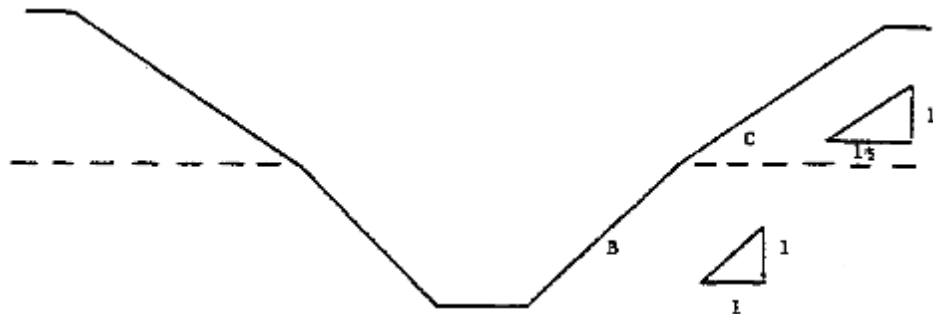
All excavations 20 feet or less in depth made in layered soils will have a maximum allowable slope for each layer as set forth below.



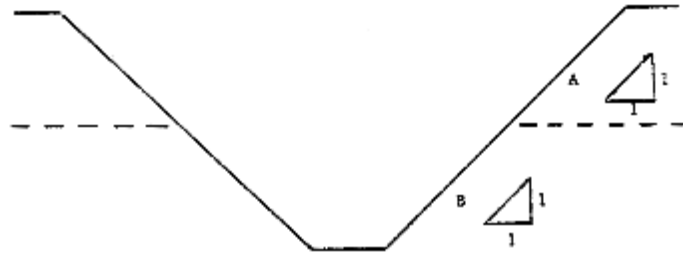
TYPE B (1 to 1 slope) OVER TYPE A (3/4 to 1 slope)



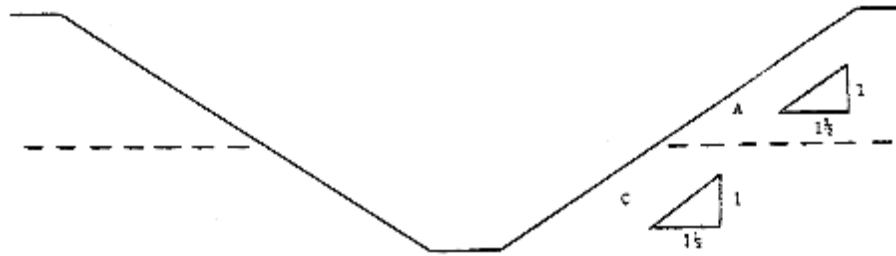
TYPE C (1 1/2 to 1 slope) OVER TYPE A (3/4 to 1 slope)



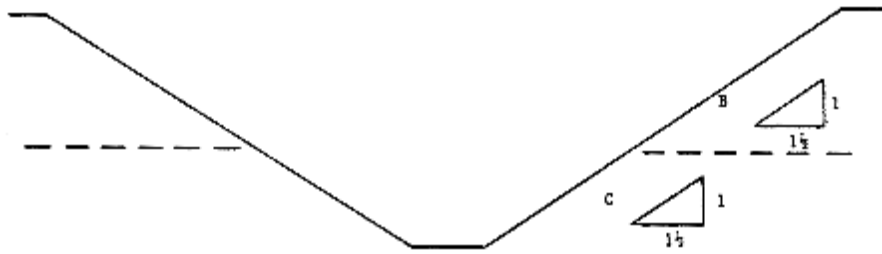
TYPE C (1 1/2 to 1 slope) OVER TYPE B (1 to 1 slope)



TYPE A OVER TYPE B (both 1 to 1 slopes)



TYPE A OVER TYPE C (both 1 1/2 to 1 slopes)



TYPE B OVER TYPE C (both 1 1/2 to 1 slopes)

**TABLE B - 1 ALUMINUM HYDRAULIC SHORING
VERTICAL SHORES
FOR SOIL TYPE A**

DEPTH OF TRENCH (feet)	HYDRAULIC CYLINDERS				
	MAXIMUM HORIZONTAL SPACING (center to center in feet)	MAXIMUM VERTICAL SPACING (center to center in feet)	WIDTH OF TRENCH (feet)		
			UP TO 8	OVER 8 UP TO 12	OVER 12 UP TO 15
over 5 up to 10	8	4			
over 10 up to 15	8		2 INCH DIAMETER*	2 INCH DIAMETER*	3 INCH DIAMETER*
over 15 up to 20	7				
OVER 20	Designed by Registered Professional Engineer				

* Safe working capacity of a 2 inch diameter cylinder must be at least 18,000 pounds; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; vertical shoring rails will have a minimum section modulus of 0.40 inch; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

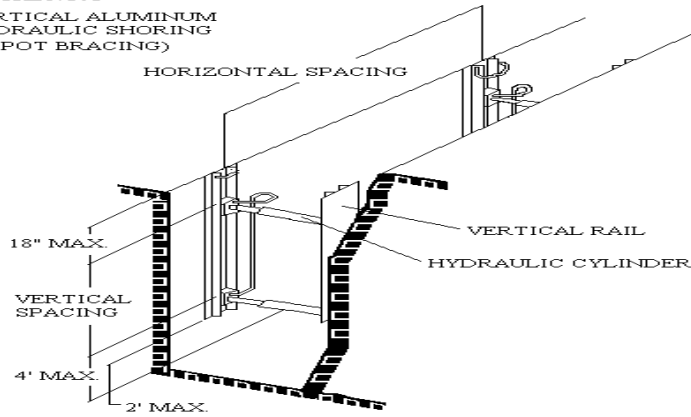
**TABLE B - 1 ALUMINUM HYDRAULIC SHORING
VERTICAL SHORES
FOR SOIL TYPE B**

DEPTH OF TRENCH (feet)	HYDRAULIC CYLINDERS				
	MAXIMUM HORIZONTAL SPACING (center to center in feet)	MAXIMUM VERTICAL SPACING (center to center in feet)	WIDTH OF TRENCH (feet)		
			UP TO 8	OVER 8 UP TO 12	OVER 12 UP TO 15
over 5 up to 10	8	4	2 INCH DIAMETER*	2 INCH DIAMETER*	3 INCH DIAMETER*
over 10 up to 15	6.5				
over 15 up to 20	5.5				
OVER 20	Designed by Registered Professional Engineer				

* Safe working capacity of a 2 inch diameter cylinder must be at least 18,000 pounds; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; vertical shoring rails will have a minimum section modulus of 0.40 inch; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

Vertical aluminum hydraulic shoring (spot bracing)

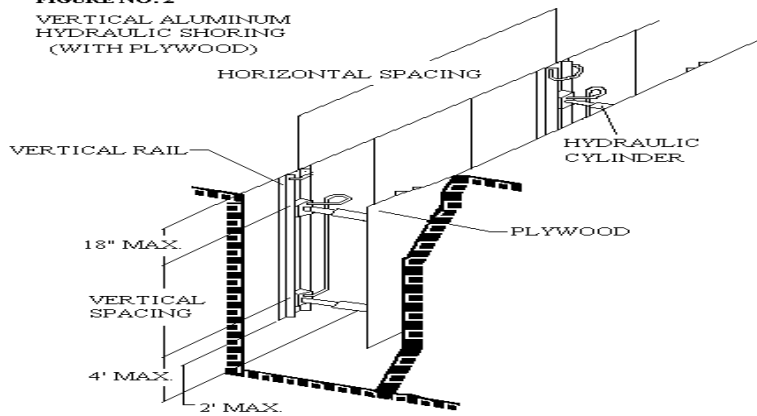
FIGURE NO. 1
VERTICAL ALUMINUM
HYDRAULIC SHORING
(SPOT BRACING)



Vertical aluminum hydraulic shoring (with plywood)

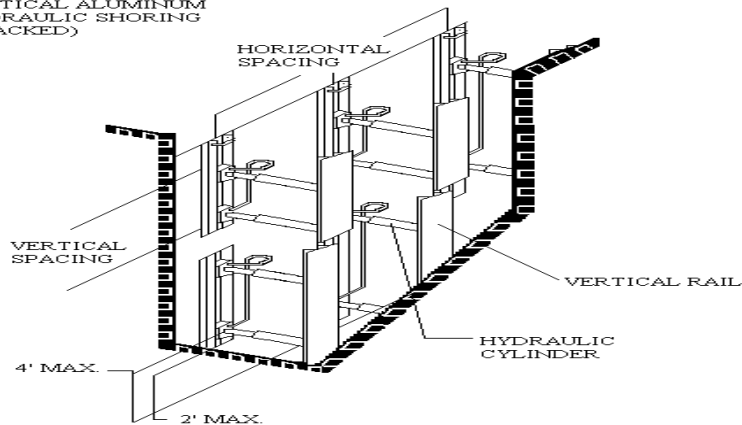
Plywood shall be 1.125 inch thick softwood or equivalent.

FIGURE NO. 2
VERTICAL ALUMINUM
HYDRAULIC SHORING
(WITH PLYWOOD)



Vertical aluminum hydraulic shoring (stacked)

FIGURE NO. 3
VERTICAL ALUMINUM
HYDRAULIC SHORING
(STACKED)



**TABLE B - 1 ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS
FOR SOIL TYPE B**

DEPTH OF TRENCH (feet)	WALES		HYDRAULIC CYLINDERS			
	VERTICAL SPACING (feet)	SECTION MODULUS (IN (3))	WIDTH OF TRENCH (feet)			
			UP TO 8		OVER 8 UP TO 12	
			HORIZ SPACING	CYLINDER DIAMETER	HORIZ SPACING	CYLINDER DIAMETER
over 5 up to 10	4	3.5	88.0	2 IN	8.0	2 IN*
		7.0	9.0	2 IN	9.0	2 IN*
		14.0	12.0	3 IN	12.0	3 IN*
over 10 up to 15	4	3.5	6.0	2 IN	6.0	2 IN*
		7.0	8.0	3 IN	8.0	3 IN*
		14.0	10.0	3 IN	10.0	3 IN*
over 15 up to 20	4	3.5	5.5	2 IN	53.5	2 IN*
		7.0	6.0	3 IN	6.0	3 IN*
		14.0	9.0	3 IN	9.0	3 IN*
OVER 20	Designed by Registered Professional Engineer					

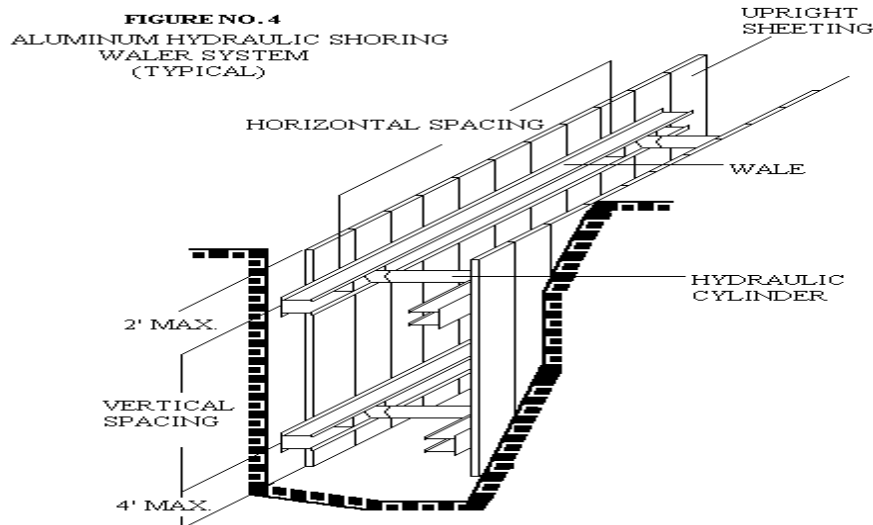
* Safe working capacity of a 2 inch diameter cylinder must be at least 18,000 pounds; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

TABLE B - 1 ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS (using Timber uprights)
FOR SOIL TYPE B

DEPTH OF TRENCH (feet)	WALES		HYDRAULIC CYLINDERS		TIMBER UPRIGHTS		
	VERTICAL SPACING (feet)	SECTION MODULUS (IN (3))	WIDTH OF TRENCH (feet)		MAX. HORIZ SPACING (ON CENTER)		
			OVER 12 UP TO 15		SOLID SHEET	2 FT	3 FT
			HORIZ SPACING	CYLINDER DIAMETER			
over 5 up to 10	4	3.5*	8.0	3 IN*	----	----	3X12
		7.0*	9.0	3 IN*			
		14.0*	12.0	3 IN*			
over 10 up to 15	4	3.5*	6.0	3 IN*	----	3X12	----
		7.0*	8.0	3 IN*			
		14.0*	10.0	3 IN*			
over 15 up to 20	4	3.5*	5.5	3 IN*	3X12	----	----
		7.0*	6.0	3 IN*			
		14.0*	9.0	3 IN*			
OVER 20	Designed by Registered Professional Engineer						

* Consult product manufacturer and/or qualified engineer for Section Modulus of available wales; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

Aluminum hydraulic shoring - Waler System (using timber uprights)



**TABLE B - 1 ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS
FOR SOIL TYPE C**

DEPTH OF TRENCH (feet)	WALES		HYDRAULIC CYLINDERS			
	VERTICAL SPACING (feet)	SECTION MODULUS (IN (3))	WIDTH OF TRENCH (feet)			
			UP TO 8		OVER 8 UP TO 12	
			HORIZ SPACING	CYLINDER DIAMETER	HORIZ SPACING	CYLINDER DIAMETER
over 5 up to 10	4	3.5*	6.0	2*	6.0	2 IN*
		7.0*	6.5	2*	6.5	2 IN*
		14.0*	10.0	3*	10.0	3 IN*
over 10 up to 15	4	3.5*	4.0	2*	4.0	2 IN*
		7.0*	5.5	3*	5.5	3 IN*
		14.0*	8.0	3*	8.0	3 IN*
over 15 up to 20	4	3.5*	3.5	2*	3.5	2 IN*
		7.0*	5.0	3*	5.0	3 IN*
		14.0*	6.0	3*	6.0	3 IN*
OVER 20	Designed by Registered Professional Engineer					

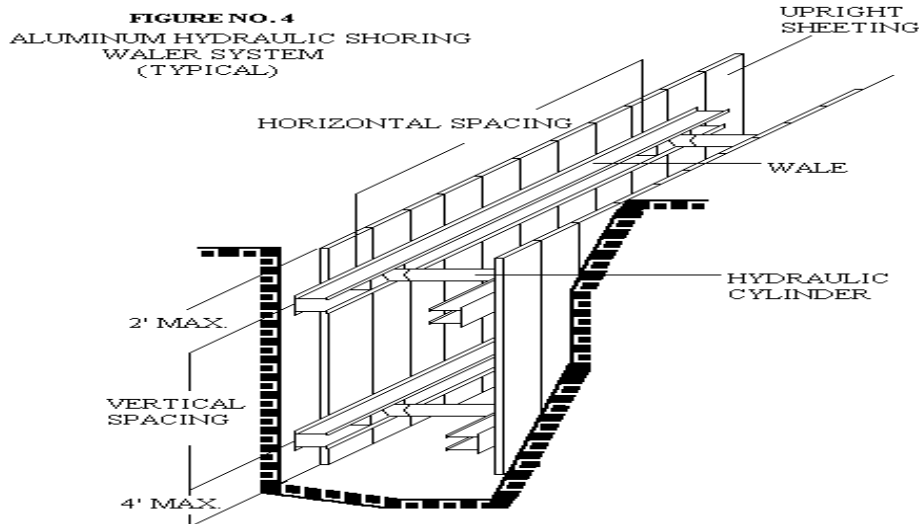
* Consult product manufacturer and/or qualified engineer for Section Modulus of available wales; Safe working capacity of a 2 inch diameter cylinder must be at least 18,000 pounds ; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

TABLE B - 1 ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS (using timber uprights)
FOR SOIL TYPE C

DEPTH OF TRENCH (feet)	WALES		HYDRAULIC CYLINDERS		TIMBER UPRIGHTS		
	VERTICAL SPACING (feet)	SECTION MODULUS (IN (3))	WIDTH OF TRENCH (FEET)		MAX. HORIZ SPACING (ON CENTER)		
			OVER 12 UP TO 15		SOLID SHEET	2 FT	3 FT
			HORIZ SPACING	CYLINDER DIAMETER			
OVER 5 UP TO 10	4	3.5*	6.0	3 IN*	3X12	----	----
		7.0*	6.5	3 IN*			
		14.0*	10.0	3 IN*			
OVER 10 UP TO 15	4	3.5*	4.0	3 IN*	3X12	----	----
		7.0*	5.5	3 IN*			
		14.0*	8.0	3 IN*			
OVER 15 UP TO 20	4	3.5*	3.5	3 IN*	3X12	----	----
		7.0*	5.0	3 IN*			
		14.0*	6.0	3 IN*			
OVER 20							

* Consult product manufacturer and/or qualified engineer for Section Modulus of available wales; safe working capacity of a 3 inch diameter cylinder must be at least 30,000 pounds; when vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

Aluminum hydraulic shoring - Waler System (using timber uprights)



SECTION 5.07 Fall Protection

The Commission has implemented this Directive for the protection of employees exposed to fall hazards. The Directive complies with Title 29 Code of Federal Regulations (CFR) §1910 Subpart D, Walking and Working Surfaces; CFR §1910 Subpart F, Powered Platforms, Manlifts, and Vehicle-Mounted Platforms; and CFR §1926 Subpart M, Fall Protection.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the work activities where employees may be exposed to falls and falling objects. The work shall be conducted safely with associated exposures eliminated and/or controlled.

Fall hazards shall first be controlled through engineering controls if feasible. When engineering controls are not feasible, administrative controls and personal fall arrest systems shall be utilized, along with thorough fall prevention training.

APPLICABILITY

The Directive applies to all Commission work sites where work activities involve exposure to falls from heights greater than or equal to four (4) feet, per general industry standards and six (6) feet per construction industry standards, and/or from falling objects hazards.

DEFINITIONS

Aerial Personnel Lifts means equipment such as powered platforms, vehicle-mounted elevated and rotating work platforms, extendible boom platforms, aerial ladders, articulating boom platforms, vertical towers and powered industrial truck platforms.

Anchorage (Anchor Point) means a secure point of attachment for lifelines, lanyards, or deceleration devices that is capable of supporting 5,000 lbs. Per employee or two times the intended impact load, whichever is greater, or for a positioning system supporting 3,000 lbs. Without failure.

Body belt means a strap with the means for securing it around the waist and for attaching it to a lanyard, lifeline, or deceleration (grabbing) device. **Commission employees are not permitted to use body belts.**

Body harness (also referred to as a Full-body harness) means an interconnected set of straps that can be secured on a person in a manner that distributes the fall arrest forces over the thighs, pelvis, waist, chest, and shoulders. It has a means for attaching the harness to other components of personal fall arrest system.

Competent Person means an individual knowledgeable (through experience and/or training) of fall protection equipment, including the manufacturer's recommendations and instructions for the proper use, inspection, and maintenance; who is capable of identifying existing and potential fall hazards; who has the authority to take prompt corrective action to eliminate those hazards; and who is knowledgeable of the rules contained in this Program regarding the erection, use, inspection, and maintenance of fall protection equipment and systems.

Connector means a device that is used to connect parts of a personal fall arrest system together (i.e. D-rings, carabineers and locking snaphooks).

Controlled Access Zone means an area in which certain work may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.

Deceleration Device means a device manufactured (fall) shock-absorbing device whereby the forces of the fall are rapidly reduced to meet acceptable levels.

Drop Line means a vertical lifeline secured to an upper anchorage for the purpose of attaching a lanyard or device.

Fall Arrest System (Personal) means the use of multiple, approved safety equipment components such as body harnesses, shock absorbing lanyards, deceleration devices, droplines, horizontal and/or vertical lifelines and anchorages, interconnected and rigged to one's body as to arrest a free fall.

Fall Distance means the actual distance from the employee's work platform (area) to the level where a fall would stop (ground level or otherwise).

Fall Protection Work Plan means a written planning document in which the employer identifies all areas in the work area where a fall hazard of 4 feet or greater exists, inclusive of areas where conventional Fall Restraint and Fall Arrest Systems cannot be utilized.

Fall Restraint System means an approved device and any necessary components that function together to restrain an employee in such a manner as to prevent that employee from falling to a lower level.

Full Body Harness means a configuration of connection straps to distribute a fall arresting force over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard, lifeline, positioning rings, or deceleration devices.

Full Body Harness System means a Class III full body harness and shock absorbing lanyard attached to an anchorage or attached to a horizontal or vertical lifeline which is properly secured to an anchorage(s) capable of withstanding the forces specified in the applicable sections.

Guardrail means a toprail at forty-two (42) inches high (plus or minus three inches), a midrail installed midway between the top edge of the guardrail system and the surface.

Hardware means snap hooks, D-rings, buckles, carabiners, and adjustors used to attach the components of a fall protection system together.

Holes (floor, roof or walking surface) means any opening greater than two inches whereby falling objects or an employee fall of greater than six feet is possible.

Horizontal Lifeline means a rail, rope, or synthetic cable installed in a horizontal plane between two anchorages and used for attachment of an employee's lanyard or lifeline device while moving horizontally.

Lanyard means a flexible line of webbing, rope or cable (usually in two, four or six-foot lengths) used to secure a harness to a lifeline or an anchorage point.

Leading Edge means the advancing edge of a floor or roof, where a fall of more than six feet is possible to the ground or to another level.

Lifeline (vertical or horizontal) means a vertical line from a fixed overhead anchorage or horizontal line between two horizontal anchorages, independent of walking or working surfaces, to which a lanyard or device is secured.

Positioning Device System means a body harness rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Qualified Person means an individual with a recognized degree or professional certificate and extensive knowledge and experience in the subject field who is capable of design, analysis, evaluation and specifications in subject work, project or product.

Restraint Line means a line from a fixed anchorage or between two anchorages to which an employee is secured in such a way as to restrict the employee from reaching a point where falling to a lower level is possible.

Self-retracting Lifeline/Lanyard means a deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal movement and which, after onset of a fall, automatically locks the drum to arrest the fall (within two feet or less).

Shock Absorbing Lanyard means a flexible line of webbing or rope used to secure a harness to a lifeline or anchorage point that has an integral shock absorber of either a rip-stitch or retractable configuration.

Snaphook means a 'locking' hook at the end of a lanyard or restraining/positioning line that has a double-action locking mechanism intended to eliminate unintentional unhooking from the D-ring of a body harness. Non-locking snaphooks are prohibited.

Toeboard means a barrier at the base of the guardrail system to prevent material and objects from falling off the surface. They are at least four (4) inches of nominal height with no less than one (1) inch clearance from the surface.

Unprotected Sides and Edges means any side or edge (except at entrances to points of access) of a floor, roof, ramp, or runway where there is no wall or guardrail system.

Walking/Working Surface means for the purpose of this program, any area whose dimensions are 45 inches or greater in all directions through which employees pass or conduct work, and can include scaffolding and aerial lifts regardless of surface dimensions.

Wall Opening means a gap in a wall where the outside bottom edge is 6 feet or more above lower levels, and the inside bottom edge (e.g. parapit wall) is less than 39 inches above walking/working surface.

Work Area means that portion of a walking/working surface where work activities are being performed.

GENERAL REQUIREMENTS

the employer must ensure that each employee on a walking-working surface with an unprotected side or edge that is 4 feet (1.2 m) or more above a lower level is protected from falling by one or more of the following: Guardrail System; Safety net; or Personal fall protection system.

Information and Training

All employees that are exposed to fall hazards shall be trained in the recognition and minimization of such hazards. Training shall take place before the employee is assigned to an activity in which fall hazards and/or falling objects hazards exist.

Training Elements

Employees shall receive fall protection training in the following areas:

- The nature of fall hazard in the typical work area
- The correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems
- The use and operation of conventional and non-conventional fall protection systems
- The role of each employee in the safety monitoring system when such system is in use.
- The limitations on the use of mechanical equipment during the performance of roofing work on low-slope roof
- The correct procedures for equipment and materials handling and storage, and the erection of overhead protection
- The correct fit, maintenance and use of all (personal) fall components, as determined by the manufacturer(s)
- Rescue procedures in the event of a fall
- All other elements in this section

Retraining

Employees will require re-training under the following conditions:

- If there are changes in the workplace that render the previous training obsolete
- If there are changes in the type(s) of fall protection systems or equipment to be used render the previous training obsolete
- If there are inadequacies in an employee's knowledge of the use of fall protection systems or equipment or observed behavior that indicates the employee has not retained the required training

Recordkeeping

The Risk Management and Safety Office shall maintain the fall protection training records. The training certification contains the name of the employee trained, the name of the person who conducted the training, and the date of the training class.

FALL ARREST and FALL RESTRAINT SYSTEMS

These systems shall be utilized where the exposure to falls is greater than 4 feet and from falling objects is reasonably foreseen. The following systems shall be utilized:

Guardrail System

(1) For wood railings: Wood components shall be minimum 1500 lb-ft/in(2) fiber (stress grade) construction grade lumber; the posts shall be at least 2-inch by 4-inch (5 cm x 10 cm) lumber spaced not more than 8 feet (2.4 m) apart on centers; the top rail shall be at least 2-inch by 4-inch (5 cm x 10 cm) lumber, the intermediate rail shall be at least 1-inch by 6-inch (2.5 cm x 15 cm) lumber.

(2) For pipe railings: posts, top rails, and intermediate railings shall be at least one and one-half inches nominal diameter (schedule 40 pipe) with posts spaced not more than 8 feet (2.4 m) apart on centers.

(3) For structural steel railings: posts, top rails, and intermediate rails shall be at least 2-inch by 2-inch (5 cm x 10 cm) by 3/8-inch (1.1 cm) angles, with posts spaced not more than 8 feet (2.4 m) apart on centers.

If wire rope is used for top rails, it shall be flagged at 6-foot intervals with high-visibility material. Steel and plastic banding are prohibited for use as top rails or midrails.

The top edge height of top rails, or equivalent guardrails system members, shall be two 42 inches (1.1 m) plus or minus 3 inches (8 cm) above the walking/working level.

Screens, midrails, mesh, intermediate vertical members, or equivalent intermediate structural members shall be installed between the top edge of the guardrail system and the walking/working surface when there are no walls or parapet walls at least twenty-one (21) inches high. When midrails are used, they shall be installed at a height midway between the top edge of the guardrail system and the walking/working level. When screens and mesh are used, they shall extend from the top rail to the walking/working level. Intermediate members, such as balusters, when used between posts, will not be more than 19 inches apart.

The guardrail system shall be capable of withstanding a force of at least 200 pounds of force applied within 2 inches of the top edge in any outward and downward direction. When the 200 pounds is applied in a downward direction, the top edge of the guardrail shall not deflect to a height less than thirty-nine (39) inches above the walking/working level.

Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members will be capable of withstanding a force of at least 150 pounds of force applied in any downward or outward direction at any point along the midrail or other member.

Guardrail systems shall be free of sharp edges and burrs to protect against punctures or lacerations and to prevent clothing from snagging.

The ends of top rails and midrails shall not overhang terminal posts, except where such an overhang does not constitute a projection hazard.

When guardrail systems are used in hoisting areas, a chain, gate or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place.

At uncovered holes, guardrail systems shall be set up on all unprotected sides or edges. When holes are used for the passage of materials, the hole shall have not more than two sides with removable guardrail sections. When the hole is not in use, it shall be covered or provided with guardrails along all unprotected sides/edges.

If guardrail systems are used around uncovered holes that are used as access points (such as ladderways), gates shall be used or the guardrail shall be offset to prevent accidental walking into the hole. Toeboards shall be utilized around the edges not utilized as the hole access.

If guardrail systems are used at unprotected sides or edges of ramps and runways, they shall be erected on each unprotected side/edge.

RESTRAINT/POSITIONING SYSTEM (Fall Restraint)

Only full body harness systems with positioning rings are to be utilized with any restraining/positioning system.

Positioning devices are not a substitute for a personal fall arrest system and is limited to use as system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Restraint line (rope) length shall not exceed the distance to fall exposure and shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds, whichever is greater.

Requirements for body harness systems, snaphooks, D-rings, and other connectors used with positioning device systems shall meet the same criteria as those for fall arrest systems.

Commission employees are prohibited from using body belts.

PERSONAL FALL ARREST SYSTEM (PFAS)

Personal Fall Arrest Systems shall:

- Limit the maximum arresting force on an employee to no more than 1,800 pounds.
Note: total body weight including tools cannot exceed 310 lbs. in order to stay under the arresting force limit
- Be rigged so that an employee can neither free fall more than 6 feet nor contact any lower level
- Bring an employee to a complete stop and limit the maximum deceleration distance an employee travels to 3.5 feet
- Have sufficient strength to withstand 5000 lbs. (excluding horizontal lifelines, which, require a safety factor of a least two times the potential impact energy)

- All components of the personal fall arrest system (lanyards, body harness and attached hardware, and shock-absorbing devices) shall meet the design specifications of OSHA §1926.502 Subpart M
- The following items/actions are prohibited for use with Personal Fall Arrest Systems:
 - Body belts
 - Non-locking snaphooks
 - Tying back to the lanyard (once around another object) for a means of an anchorage point, unless the manufacturer designs the lanyard for this purpose, the object tied around can support the anticipated fall force and the object does not have sharp edges or burrs that will cut the lanyard.

UTILIZING the PERSONAL FALL ARREST SYSTEM

Pre-Use Inspection

All components shall be inspected prior to each use for wear, damage, and other deterioration (see equipment inspection and maintenance procedures). If during the inspection the user discovers defects or damage, the user shall immediately remove the component from service.

Proper Body Harness Fit Guidelines

The body harness type and size shall meet the physical needs of the user (male/female or small, medium, large, etc.).

All manufacturers' guidelines for proper fit shall be followed.

Shoulder, thigh, button and chest straps shall be fit snugly whereas it is slightly difficult to slide the hand underneath.

All loose strap ends shall be tucked-in.

D-ring placement should be between the shoulder blades.

Chest straps should be positioned across the mid-chest area.

Anchorage Points

Anchorage shall be used under the supervision of a competent person, as part of a complete (personal) fall arrest system that maintains a safety factor of two (i.e., capable of supporting at least twice the weight expected to be imposed on it).

Anchorage used to attach (personal) fall arrest systems will be independent of any anchorage being used to support or suspend platforms and shall be capable of supporting at least 5,000 pounds (22.2 kN) of force per person attached.

Anchorage points include:

- Lifelines (horizontal and vertical)
- Designed anchorage points on aerial lifts

- Eye-bolts listed for use by the manufacturer
- Specially designed anchorage tools specifically designed to meet fall force requirements, including:
- Wrap-around (tie back) lanyards as approved by the manufacturer
- I-beam clamps and cross arm straps designed specifically as an anchorage point

Prohibited anchorage points include, but are not limited to:

- Standard guardrails and railing
- Ladders / rungs
- Scaffolding, unless approved by the manufacturer for or with anchorage points
- Light fixtures, ductwork, conduit, pipe vents, wiring/duct/piping harnesses, other roof stacks, vents or fans
- C-clamps
- Piping (unless capable of meeting the criteria of an anchorage point)
- To a lanyard (around a solid object), unless the lanyard and hardware is manufactured for that purpose

Lifeline/Lanyard Applications

Lanyards shall only be attached to anchorage points capable of withstanding the minimum forces, per OSHA's requirements.

Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds (22.2 kN).

Shock-absorbing lanyards are required to limit the fall force to less than 1800 pounds.

Self-retracting lanyards shall be capable of withstanding the tensile load of 3,000 pounds and limit the free fall distance to two (2) feet or less.

Lanyards that do not limit free fall distances to 2 feet or less, such as ripstitch lanyards and tearing/deforming lanyards shall be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position

Horizontal lifelines will be designed, installed, and used under the supervision of a Competent Person, as part of a complete (personal) fall arrest system. Lifelines shall be protected against being cut or abraded. Horizontal lifelines cannot exceed sixty (60) feet in length.

Vertical lifelines shall be utilized with leading edge work, shall reach the ground, and the method of anchorage attachment shall be of proper design (i.e. no knots).

GUARDING FLOOR and WALL OPENINGS

All employees working on, at or near wall openings where the bottom edge of the wall opening is four (4) feet or more and the inside bottom edge of the wall opening is less than thirty-nine (39) inches above the walking/working surface, shall be protected by use of either a guardrail system or a personal fall arrest system.

All skylight floor openings and holes shall be guarded by a standard skylight screen/guard or a fixed standard railing on all exposed sides.

Standard skylight screens shall be capable of withstanding a minimum load of 200 pounds applied to any point of the screen and will not deflect under ordinary loads.

All manhole floor openings shall be guarded by a standard manhole cover.

Every floor hole into which a person can accidentally walk shall be guarded by a standard guardrail system or a hole cover. Each cover for a hole in a walking/working surface shall be capable of supporting without failure, at least twice the maximum intended load that may be imposed on the cover at any one time; and shall be secured to prevent accidental displacement.

Hole Covers

Hole covers shall be installed over holes 2" and larger in floors, roofs and walkways. Hole covering material shall support at least two times the potential weight to which it may be subjected.

When plywood is used, it shall be at least ¾ inch in thickness.

All hole covers shall be secured in place in such a manner as to not be easily displaced. Examples of securing methods include, but is not limited to: nailing, attaching cleats, wire, etc.

Such covers shall have the word 'HOLE' or 'COVER' conspicuously marked on the top surface. Where covers are too small for such marking, they shall be painted or significantly marked in a distinctive color such as orange, red or green.

FIXED LADDERS (that extend more than 24 feet (7.3 m) above a lower level)

For fixed ladders that extend more than 24 feet (7.3 m) above a lower level, the employer must ensure:

Existing fixed ladders. Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well;

New fixed ladders. Each fixed ladder installed on and after November 19, 2018, is equipped with a personal fall arrest system or a ladder safety system;

Replacement. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and

Final deadline. On and after November 18, 2036, all fixed ladders are equipped with a personal fall arrest system or a ladder safety system.

When a one-section fixed ladder is equipped with a personal fall protection or a ladder safety system or a fixed ladder is equipped with a personal fall arrest or ladder safety system on more than one section, the employer must ensure:

The personal fall arrest system or ladder safety system provides protection throughout the entire vertical distance of the ladder, including all ladder sections; and

The ladder has rest platforms provided at maximum intervals of 150 feet (45.7 m).

The employer must ensure ladder sections having a cage or well:

Are offset from adjacent sections; and

Have landing platforms provided at maximum intervals of 50 feet (15.2 m)

The employer may use a cage or well in combination with a personal fall arrest system or ladder safety system provided that the cage or well does not interfere with the operation of the system.

STAIRWAYS

The employer must ensure:

Each employee exposed to an unprotected side or edge of a stairway landing that is 4 feet (1.2 m) or more above a lower level is protected by a guardrail or stair rail system;

Each flight of stairs having at least 3 treads and at least 4 risers is equipped with stair rail systems and handrails, per **Table D-2 -- Stairway Handrail Requirements (1910.28(b)(11)(ii))**.

Stairways having four or more risers or rising more than 30 inches (76 cm), whichever is less, shall be equipped with at least one handrail; and one stairrail system along each unprotected side or edge.

Handrails shall not be less than 30 inches (76 cm) and not more than 38 inches (97 cm), as measured from the leading edge of the stair tread to the top surface of the handrail.

The height of stair rail systems installed before January 17, 2017 is not less than 30 inches (76 cm) from the leading edge of the stair tread to the top surface of the top rail;

The height of stair rail systems installed on or after January 17, 2017 is not less than 42 inches (107 cm) from the leading edge of the stair tread to the top surface of the top rail.

The top rail of a stair rail system may serve as a handrail only when: The height of the stair rail system is not less than 36 inches (91 cm) and not more than 38 inches (97 cm) as measured at the leading edge of the stair tread to the top surface of the top rail.

Handrails and the top rails of stair rail systems shall be capable of withstanding, without failure, a force of at least 200 pounds (890 N) applied in any downward

Note: The width of the stair must be clear of all obstructions

SCAFFOLDS AND ROPE DESCENT SYSTEMS

The employer must ensure:

Each employee on a scaffold is protected from falling in accordance 29 CFR part 1926, subpart L; and

Each employee using a rope descent system 4 feet (1.2 m) or more above a lower level is protected from falling by a personal fall arrest system.

WORK ON LOW-SLOPE ROOFS

When work is performed less than 6 feet (1.6 m) from the roof edge, the employer must ensure each employee is protected from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system.

When work is performed at least 6 feet (1.6 m) but less than 15 feet (4.6 m) from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.

When work is performed 15 feet (4.6 m) or more from the roof edge, the employer must:

Protect each employee from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system or a designated area. The employer is not required to provide any fall protection, provided the work is both infrequent and temporary; and

Implement and enforce a work rule prohibiting employees from going within 15 feet (4.6 m) of the roof edge without using fall protection as prescribed.

WALKING-WORKING SURFACES NOT OTHERWISE ADDRESSED:

Except as provided elsewhere in CFR 1910, subpart D, the employer must ensure each employee on a walking-working surface 4 feet (1.2 m) or more above a lower level is protected from falling by:

- Guardrail systems;
- Safety net systems; or
- Personal fall protection systems, such as personal fall arrest, travel restraint, or positioning systems.

PROTECTION FROM FALLING OBJECTS

When an employee is exposed to falling objects, the employer must ensure that each employee wears head protection that complies with CFR 1910, subpart I.

In addition, the employer must protect employees from falling objects by implementing one or more of the following:

Erecting toeboards, screens, or guardrail systems to prevent objects from falling to a lower level

Erecting canopy structures and keeping potential falling objects far enough from an edge, hole, or opening to prevent them from falling to a lower level; or

Barricading the area into which objects could fall, prohibiting employees from entering the barricaded area, and keeping objects far enough from an edge or opening to prevent them from falling to a lower level.

OTHER FALL PROTECTION REQUIREMENTS

Aerial Personnel Lifts

Employees utilizing aerial personnel lifts (e.g. scissor lifts, genie lifts, cherry-pickers, boom-lifts, etc.) shall use a restraint/positioning system or (personal) fall arrest system, even though a guardrail system is in place.

Attachment points for these systems shall be capable of withstanding 5,000 pounds and shall be maintained in the floor of the lift or where designated by the manufacturer.

Rails of such lifts shall not be used as attachment points unless designated for that purpose by the manufacturer.

Hoist Areas

Each employee in a hoist area shall be protected from falling six (6) feet or more by guardrail, restraint/positioning or (personal) fall arrest systems.

If guardrail systems (or chain gate or guardrail), or portions thereof, must be removed to facilitate hoisting operations, as during the landing of materials, and a worker shall lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee shall be protected by a (personal) fall arrest system.

Excavations

Employees who work at the edge of an excavation six (6) feet or more in depth shall be protected from falling into the excavation by guardrail systems or covers.

Where walkways are provided to permit employees to cross over excavations, guardrails are required on the walkway if the fall would be six (6) feet or more to the lower level.

EQUIPMENT INSPECTION and MAINTENANCE

Inspection, Replacement and Destruction

All fall protection equipment shall be visually inspected before each use. Defective equipment shall be tagged 'out of service' and be immediately removed, and be replaced with equipment in good repair.

BODY HARNESS INSPECTION

Beginning at one end, holding the body side of the harness toward you, grasp one area of the harness with your hands six to eight inches apart.

Bend the strap in an inverted "U". Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, burn marks or chemical damage. Special attention should be given to the attachment of buckles and D-rings to strap webbing. Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface.

Rivets should be tight and unmovable with fingers. Body-side rivet base and outside rivet burr should be flat against the material. Bent rivets will fail under stress. Especially note condition of D-ring rivets and D-ring metal wear pads (if applicable). Discolored, pitted, or cracked rivets indicate chemical corrosion.

The tongue or billet of bolts receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets.

Harnesses using punched holes without grommets should be checked for torn or elongated holes causing slippage of the tongue buckle.

HARDWARE (Buckles, D-Rings, Snaps and Thimbles)

Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges.

Inspect the friction buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment points of the center bar.

Inspect the sliding bar buckle frame and sliding bar for cracks, distortion, or sharp edges. The sliding bar should move freely. Knurled edge will slip if worn smooth. Pay special attention to corners and ends of sliding bar.

Inspect the forged steel D-ring for cracks or other defects. Inspect the assembly of the D-ring to the body pad or D-saddle. If the D-ring can be moved vertically independent of the body pad or D-saddle, the harness should be replaced. Check D-Rings and D-Ring metal wear pad (if any) for distortion, cracks, breaks, and rough or sharp edges. The D-Ring bar should be at a 90-degree angle with the long axis of the belt and should pivot freely.

Inspect closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seal into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper.

The thimble must be unmovable in the eyes of the splice, and the splice should have no loose or cut strands. The edges must be free of sharp edges, distortion, or cracks.

LANYARD (shock-absorbing)

Begin at one end and work to the opposite end. Slowly rotate the lanyard so the entire circumference is checked. Factory spliced ends require particular attention and closer inspection.

LANYARD (Webbing) Retractable

Bend the webbing over a non-lacerating edge; observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks, and charring are obvious signs of chemical or heat damage. Closely observe for any breaks in the stitching.

ROPE

Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Areas weakened by extreme loads will appear as noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period.

Strands should be separated and inspected since the rope may wear on the inside if grit or moisture becomes embedded.

CLEANING & STORAGE

Storage areas shall be maintained as clean, dry and free of exposure to fumes or corrosive elements.

Cleaning methods established by the manufacturer shall be followed for all components. Generally, the following applies for body harnesses:

- Wipe off all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion
- Wipe the belt dry with a clean cloth. Hang freely to dry but away from excessive heat
- Bolts and other equipment should dry thoroughly without close exposure to heat, steam, or long periods of sunlight
- Mildly dirty cotton may be cleaned normally. For heavy dirt or grease, soak belts in a solution of one tablespoon of grease cutter to one gallon of water. **DO NOT USE A STRONGER SOLUTION.** After soaking, rinse again, then hang to dry
- All fall protection, which is not in the original package, shall be stored in a clean, dry area

POST-FALL INCIDENTS

All employees involved in a fall shall be required to receive an immediate medical evaluation. All components of a personal fall arrest system involved in any fall shall be immediately taken out of service for inspection and disposal as necessary.

SECTION 5.08

Fire Prevention Plans

The Commission has implemented this Directive to ensure the safety of employees. The Commission complies with Title 29 Code of Federal Regulations (CFR) §1910.39, Fire Prevention Plans.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to ensure that every employee is protected against foreseeable hazards associated with fires.

APPLICABILITY

This Directive applies to all Commission employees.

POLICY

It is the policy of the Commission to notify all employees of the elements of the fire prevention plan. The intent of this plan is to provide Commission employees and patrons with adequate information to prevent the propagation of fires, as well as the means to protect themselves and others in the event of a fire.

RESPONSIBILITY: It is the responsibility of each Department Head to enforce this Directive.

FIRE PREVENTION PLAN ELEMENTS

Written and oral fire prevention plans

A fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.

Minimum elements of a fire prevention plan

A fire prevention plan must include: A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;

Procedures to control accumulations of flammable and combustible waste materials;

Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials;

The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and

The name or job title of employees responsible for the control of fuel source hazards.

Employee information

An employer must inform employees upon initial assignment to a job of the fire hazards to which they may be exposed. An employer must also review with each employee those parts of the fire prevention plan necessary for self-protection.

Major Workplace Fire Hazards: The following is a list of common fire hazards and prevention strategies:

Fire Hazards/Potential Ignition Sources	Prevention Strategy
Arson	<ul style="list-style-type: none">• Security systems (building entry devices, cameras)
Cooking	<ul style="list-style-type: none">• Limited to kitchen areas• Routine inspection and maintenance of cooking appliances
Smoking Materials	<ul style="list-style-type: none">• No smoking policy in Commission facilities
Electrical (wiring, appliances and equipment)	<ul style="list-style-type: none">• Routine inspection and maintenance program• Use of UL/FM approved equipment• No Temporary extension cord usage as permanent wiring.
Accumulation of combustible materials	<ul style="list-style-type: none">• Routine inspection of Commission facilities• Maintain clear egress and clearance to electrical/heat sources
Improper handling and storage of combustible/flammable liquids	<ul style="list-style-type: none">• Approved flammable liquid storage cans, cabinets/rooms• Hazardous waste disposal program• Bonding and grounding
Space heaters	<ul style="list-style-type: none">• No unapproved personal space heaters in Commission facilities
Hot work hazards (welding, cutting or brazing)	<ul style="list-style-type: none">• Hot work permit and Job Hazard Analysis

FIRE PROTECTION EQUIPMENT AND SYSTEMS

Most major facilities within the Commission buildings are equipped with automatic fire detection and alarm systems, which are monitored by the Park Police. The following are fire detection, notification, and suppression systems, which can control a fire in Commission facilities:

Building fire alarm detection and notification systems

- Smoke and heat detectors
- Manually activated pull stations

Building fire suppression systems

Sprinkler systems

- Water
- Halon
- Commercial kitchen hood extinguisher systems (foam)

Standpipe systems

- Wet
- Dry

Fire extinguishers

Fire extinguishers are provided at the workplace; however, employees are not required to use them.

Types of extinguishers

- Multi-purpose dry chemical (Class ABC fires)
- Water (Class A fires)
- Carbon Dioxide (Class B and C fires)
- Sodium Chloride, Lith-x, Pyrene G-1 (Class D extinguishers heavy metal fires)
- Potassium acetate (Class K extinguisher – designed for kitchens using cooking oils with auto ignition temperatures above 400°F)

Fire rated doors and fire-resistant barriers

HOUSEKEEPING

The accumulations of flammable and combustible waste materials must be controlled so that they do not contribute to a fire emergency. The following are housekeeping procedures used to control such accumulations.

GENERAL HOUSEKEEPING REQUIREMENTS

- Keep stairwells, exits and passageways free of obstructions at all times.
- Keep access to fire protection equipment (pull stations and fire extinguishers) free and clear.
- Store flammable and combustible liquids in approved storage containers and cabinets.
- Keep storage 18 inches away from sprinkler deflectors and 24 inches from the ceiling in non-sprinkler buildings.
- Assure fire doors are unobstructed and not blocked/wedged open.
- Avoid the accumulation of combustibles (Paper, fuel, etc.).

TRAINING

Employees shall review and become familiar with the fire prevention plan, to protect themselves in the event of a fire emergency.

The written plan is contained in the Risk Management and Safety Manual which is available on **inSite**. A hard copy should also be kept at each facility and be available for employee review.

FIRE SAFETY TRAINING OUTLINE

- Classes of fire
- Potential fire hazards on the job
- Fire prevention procedures
- Building fire protective features
- How to recognize fire exits
- Location and types of fire prevention equipment
- Steps to take in the event of fire or smoke
- Use and limitations of fire extinguishers

MAINTENANCE

Commission personnel shall properly maintain equipment and systems installed on heat producing equipment, to prevent accidental ignition of combustible materials. Heat producing equipment such as burners, heat exchangers, boilers, ovens, stoves, fryers, etc., shall be properly maintained and kept clean of flammable residues. In addition, flammables shall not be stored close to these pieces of equipment.

ADDITIONAL INFORMATION

For additional information or questions, please contact the Risk Management and Safety Office at 301-454-1740.

Attachment A

Names and Job Titles of those personnel responsible for maintenance of equipment and systems installed to prevent or control ignition sources or fires:

Name		Name	
Title		Title	
Dept.		Dept.	
Phone #		Phone #	
Cell Phone		Cell Phone	
E-mail		E-mail	

SECTION 5.09

Fire Safety

The Commission has implemented this Directive for the protection of employees, visitors and property exposed to fire hazards. This Directive complies with Title 29 Code of Federal Regulations (CFR) §1910 Subpart E, Fire Prevention Plans; 29 CFR §1910 Subpart H, Hazardous Materials; 29 CFR §1910 Subpart L, Fire Protection; 29 CFR §1910 Subpart Q, Hot Work; and 29 CFR §1910 Subpart S, Electrical.

PURPOSE

The purpose of this Directive is to provide information to individual employees and departments within the Commission to assist them in maintaining a safe work environment. This Directive will empower employees to take appropriate action to ensure their own safety, the safety of co-workers and visitors in the event of a fire emergency.

APPLICABILITY

This Directive applies to all Commission work sites. Work activities shall be conducted safely with associated fire exposures eliminated and/or controlled through a fire protection and prevention plan.

Responsibilities

Supervisors

Departments are expected to maintain safe and healthy living, learning, and working environments for Commission employees and the public. Managers and Supervisors shall implement the requirements of this Directive to assure compliance with applicable codes, regulations, and policies. They shall also be aware of applicable training requirements necessary under OSHA programs and applicable fire codes. Supervisors should periodically inspect and/or coordinate the inspection of all workplaces to identify hazards. The Risk Management and Safety Office will assist supervisors with solutions for eliminating identified hazards. This responsibility will fall at the highest supervisory level of each departmental unit unless otherwise specified.

Employees

Employees play an important part in assuring safety: they must do what they can to protect themselves and others and respond appropriately to emergencies. Employees shall avail themselves of information pertaining to the safe conduct of their work, regardless of the setting.

EMERGENCY PLANNING and PREPAREDNESS

Note: Please refer to the Emergency Action Plan Policy Directive, as well as Facility Specific Emergency Action Plans for specific details on preparing for and responding to emergencies.

An Emergency Action Plan (EAP) details the actions employers and employees shall take to ensure employee safety during a **Fire** and/or other emergencies. Each Site-Specific EAP should be comprehensive and address all issues specific to that facility which may arise during an emergency. The EAP should also address unique worksite conditions. (E.g., are there extraordinary hazards present, does your building have a fire alarm system, etc.).

Responding to a Fire Emergency

If a fire emergency occurs, employees have a responsibility to take immediate and appropriate action to safeguard themselves and assist others to the extent possible. For those buildings that do not have a fire alarm, employees may notify other occupants by knocking on doors and shouting “fire” as they exit the building. No one is expected to jeopardize their own safety to do this. The Emergency Response Plan will be activated, and **all personnel must evacuate the building**.

There is no employer expectation for employees to attempt to extinguish a fire or otherwise stay in their workplace for any reason upon being notified of a fire emergency. Specific employee involvement may be required, however, to maintain critical equipment or services or to arrange for the orderly shutdown of hazardous processes. Such a requirement should be written into the employee’s job description.

PROCEDURES FOR RESPONDING TO A FIRE

IF THERE’S A FIRE

SOUND THE ALARM

If you discover or suspect a fire, sound the building fire alarm.

If there is no alarm in the building,
notify other occupants by knocking on doors and shouting
“Fire”
as you leave the building.

LEAVE THE BUILDING

Try to rescue others **ONLY** if you can do so safely.
Move away from the building at least 1000 feet away, out of the way of the first responders.
Don’t go back into the building until the fire department says it is safe to do so.

CALL THE FIRE/POLICE DEPARTMENT – 911

Dial 911 or use an “emergency” phone.
Give as much information as possible to the 911 operator.

FIRE and other EMERGENCY DRILLS

Once the EAP has been reviewed with employees and everyone has had the proper emergency response training, practice drills shall be held at least twice per year, or as often as necessary to keep employees prepared. The Risk Management and Safety Office can assist with drills, which may also involve outside agencies such as the Fire Department and Park Police.

Public Assembly Occupancies:

Assembly occupancies include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more persons for such purposes as education, deliberation, entertainment, eating, drinking, amusement, awaiting transportation or similar uses, or that are used as a special amusement building regardless of occupant load. (NFPA Life Safety Code, 2000 edition)

Public assembly events involve various risk factors associated with having large numbers of people in one location. The primary risk factors are high occupant density, occupants that are not familiar with the building, occupants who may be impaired due to consumption of alcohol and/or drugs, and events held where there is limited lighting. These risks can be managed through proper event planning and management.

Persons planning public assembly events are encouraged to contact the Risk Management and Safety Office for information and assistance. Consultation is available by telephone, E-mail, and in-person.

Examples of assembly occupancies found in the Commission include large halls, auditoriums, sports arenas, and theaters. All assembly areas are required to have signs posted stating the allowable number of persons permitted in the space with considerations given for the use of the space. The local fire department can assist the Commission in evaluating the spaces and providing occupancy information.

The employees or attendants of assembly occupancies must be trained in emergency evacuation procedures and practice their duties during fire drills. They must also be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment where provided. In "live" theaters, motion picture theaters, auditoriums, and other similar assembly occupancies, an audible announcement should be made prior to the start of each program to notify occupants of the location of the exits to be utilized in case of fire or other emergency, as well as any other emergency procedures unique to the assembly area. Training can be arranged by contacting the Risk Management and Safety Office.

MEANS of EGRESS (Exiting)

Elements of Egress

An obvious, adequate, and unobstructed means of egress is the first line of defense for building occupants in any emergency. The "means of egress" has three parts:

Exit Access:	The exit access (portion of a means of egress that leads to the entrance of an exit),
Exit:	The exit (portion of a means of egress that is separated from other areas of the building from which escape is to be made by walls, floors, doors, or other means that provide the path necessary for the occupants to proceed with reasonable safety to the exterior of the building); and
Exit Discharge:	The exit discharge (that portion of a means of egress between the termination of the exit and a public way).

Fire Prevention

Fire prevention starts with identifying fire hazards. All the employees of the Commission have a personal obligation to be aware of fire hazards and to reduce or eliminate the risk of fire.

ELEMENTS of FIRE PREVENTION PLANNING

- Develop a list of all major fire hazards (See the Fire Prevention Plans Program, section 5.08).
- Assure proper handling and storage procedures for hazardous materials.
- Identify potential ignition sources and the means used to control them.
- Develop a list of fire protection equipment necessary to control each major hazard.
- Establish procedures to control the accumulation of flammable and combustible waste materials.
- Establish procedures for regular inspection and maintenance of safeguards installed on heat-producing equipment to prevent accidental ignition of combustible materials.
- Identify by name or job title employees responsible for control of fuel source hazards.

In addition, the department must communicate certain information to employees, which includes:

- Informing each employee of the fire hazard(s) to which he or she is exposed.
- Review with employees, when they are initially assigned to a job, those parts of the fire prevention plan that are necessary for employees to protect themselves from potential fire hazards.
- Review the fire prevention plan again with any employee that is reassigned to a new job with different hazards.
- Review the plan with all employees any time a change is made to the plan.
- Review the plan with all new hires.

BASIC FIRE PREVENTION STRATEGIES

After identifying the hazards in your area, take action to eliminate or control these hazards and prevent fires.

Practice proper **Housekeeping**, namely:

- Avoid the accumulation of combustible and excess materials
- Ensure materials and equipment are properly stored and kept well organized
- Always maintain passageways and doors in a clear and unobstructed manner

FIRE-RATED DOORS and FIRE-RESISTANT BARRIERS:

Fire-rated Doors

Fire-rated doors are generally found at any opening to a corridor, stairwell, storage room, and mechanical and/or electrical equipment room.

Blocking doors with wedges or other items allows smoke and fire to spread rapidly through a building, possibly preventing occupants from quickly evacuating during a fire emergency. Personnel are advised to refrain from propping and leaving fire doors in the open position.

Magnetic Door Hold Open Devices

Magnetic door hold open devices are permitted only if they are tied into the fire alarm system or to single station smoke detector located in front of the door.

Renovation Projects

All building materials used in renovation and building projects must meet the state fire code requirements for fire-resistance, and all work must be performed in accordance with the building code requirements.

Firestopping

All penetrations of floors, ceilings, and/or walls are avenues for smoke and heat travel. These penetrations must be properly firestopped where required. This includes the replacing of ceiling tile when disturbed for any reason.

ELECTRICAL HAZARDS:

Wiring, Switches and Plugs

Inspect all wiring, switches and plugs. Report any damage found to have a qualified electrician make any repairs necessary.

Electrical Outlets

All electrical outlets, junction boxes, and electrical panels are required to have proper cover plates at all times. If a cover plate is found missing, have an electrician correct the hazard.

Junction Boxes and Electrical Panels

Junction boxes and the breakers/disconnects in electrical circuit panels are required to be properly labeled advising what it controls for emergency response and maintenance personnel.

Wet Electrical Cords

Do not use electric cords or equipment that is damp or wet unless they are approved for such use. Do not connect or disconnect electrical cords or equipment when your hands are wet.

Wet Electrical Cords

Overloaded Motors or Circuits

Do not overload motors or circuits; overloaded motors and circuits can easily be a source of ignition.

Lighting Fixtures

Report any problems with lighting fixtures immediately.

Faulty Heating Elements

Faulty heating elements can be a source of fire. Report any problem with heating equipment immediately.

Extension Cords

The improper use of electrical extension cords is strictly prohibited. Do not use extension cords in place of the permanent wiring in the building or for extended periods of time. If you need electrical power and there is no outlet available, have additional outlets installed or use a power strip with breaker protection. Each power strip must be plugged directly into a wall outlet. Heavy duty, single appliance extension cords may be used for temporary use only and must be

Multiple Plug Electrical Adapters

plugged directly into an outlet.

The improper use of multiple plug electrical adapters is strictly prohibited. Remove the multiple plug adapters and install permanent electrical wall outlets or replace with power strips with breaker protection. Each power strip must be plugged directly into a wall outlet.

Don't try to fix electrical problems yourself!

Report all electrical problems immediately so that a qualified electrician can make the repairs.

FLAMMABLE and COMBUSTIBLE MATERIALS:

Substitution

Where possible, flammable materials should be replaced by safer, less flammable materials to reduce the risk of fires. Any substituted material should be stable, non-toxic and should either be nonflammable or have a high flashpoint.

Storage

The proper storage of flammable liquids in a work area is required to reduce the risk of fire and prevent health hazards. Remember that the quantities that can be stored in one location are limited. At a minimum, storage areas shall be provided with fire extinguishers, however, a fire protection system should be considered for any large storage area.

Flammable liquids storage cabinets should be used where greater quantities of liquids are needed. They are not designed to contain a fire but are designed to prevent a fire outside from reaching the contents of the cabinet for a period of about 10 minutes - just enough time to allow escape from the area. Limits for cabinets are:

- No more than 120 gallons (454L) of Classes I, II, and IIIA combined in one cabinet.
- Only three cabinets are allowed in each fire area unless each group of three can be separated by 100 feet.
- If the building is sprinklered, the number can be doubled to six cabinets.
- If stored amounts exceed the above limits, a separate inside storage room is required in accordance with the requirements found in NFPA 30, Chapter 4.

Handling

Flammable and combustible liquids require careful handling at all times. Containers should be tightly sealed when not in use, and liquids should be stored in an area where temperature is stable to prevent a buildup of internal pressure due to vaporization. Department of Transportation (DOT) metal safety cans are a good risk management tool where smaller quantities of liquids are handled. They prevent spillage and have spring-loaded safety caps that prevent vapors from escaping and act as a pressure vent if the can is engulfed in fire, preventing explosions, which can accelerate the rate at which a fire spread.

Note: The use of 'plastic fuel cans' is prohibited at the Commission.

Users are expected to limit the risk of a fire by reducing the quantities of liquids located outside of storage cabinets/areas. Quantities of flammable and combustible liquids located outside of storage cabinets/areas should be restricted to one day's supply or to what can be used during a single shift.

Some flammable liquids, such as xylene, toluene, benzene and gasoline have a tendency to accumulate a static electric charge. If the charge is released a spark can be produced and ignition can result. Most nonpolar solvents that do not mix with water have this characteristic. Polar solvents, such as acetone and other ketones and alcohols, don't usually

present static charges. To prevent the build up of static charge, it is important to bond and ground metal dispensing and receiving containers together before pouring. Each container is wired together, and one container is connected to a ground, to allow any charge that may develop to drain away safely.

Ventilation

To prevent the accumulation of vapors inside a flammable or combustible materials storage room or area, a continuous mechanical exhaust ventilation system should be in place. Both makeup and exhaust air openings must be arranged to provide air movement directly to the exterior of the building. Any exhaust ventilation ducts must be exclusive to the system and used for no other purposes.

Elimination of Ignition Sources

All nonessential ignition sources must be eliminated where flammable liquids are used or stored.

The following is a list of common sources of ignition:

- Open flames
- Welding, cutting and brazing operations
- Furnaces
- Matches and lighters
- Heaters (portable or fixed)
- Motors, switches, and circuit breakers (these need to be explosion-proof in areas where flammable liquids are used or stored).
- Mechanical sparks from friction. (Use non-sparking tools in these areas).
- Transferring flammable liquids to and from containers (proper grounding and bonding procedures must be used to eliminate static sparks.
- Smoking materials, etc.

Removal of Incompatibles

Materials that can contribute to a flammable liquid fire should not be stored with flammable liquids. Such as oxidizers and organic peroxides

Spills

If a spill occurs, employees should take the following actions:

- Limit it's spread by using a suitable absorbent material, or by diking if necessary.
- Minimize vapors by isolating the spilled material if possible.
- Make sure all sources of ignition are shut off or controlled.
- Notify your supervisor immediately and contact the Risk Management and Safety Office for assistance and guidance.
- Begin cleanup right away If it is safe, and you have the right PPE, materials and equipment to do so.

OPEN FLAMES:

Open flames in the workplace constitute a hazard to employees due to the possibility of burns by direct exposure to flame, as well as from igniting fires and/or explosions. Open flames, when used incorrectly or left unattended, can ignite combustible materials. Fires caused by open flames can result in loss of life and/or the destruction of property.

The Occupational Safety & Health Administration (OSHA) sets specific standards that employers must follow regarding open flames in workplaces where flammable and combustible liquids are used and stored. OSHA also expects employers to comply with industry safety standards beyond those specified by OSHA, if it is reasonable and feasible for the employer to do so.

OSHA does not have a standard for every likely use of an open flame in the workplace, however, even in situations where a specific standard does not exist, an employer must still comply with OSHA's General Duty Clause to keep the workplace free from recognized hazards. In addition to complying with OSHA's specific standards regarding open flames, an employer is required by this General Duty to use applicable safety devices or industry best practices when reasonable and feasible to enhance workplace safety.

In the interest of safety and health, the use of open flames for incidental purposes, such as the burning of candles and incense shall be prohibited at Commission facilities. An exemption, with proper authorization will be made for special events and functions, under the strict supervision of event staff,

within established safety guidelines. Those open flames must be extinguished immediately after the function is over.

Workplace operations requiring the use of open flames are permitted when covered by the 'Hot Work Permit Program'.

COMPRESSED GASES

Compressed gas cylinders must be properly stored and secured at all times to prevent tipping/falling. Routinely inspect cylinders for:

- leaking regulators,
- physical damage to the cylinder or valves,
- obvious signs of defects,
- deep rusting
- pitting

FIRE PROTECTION SYSTEMS

These include:

- Building Fire Alarms
- Automatic Fire Alarm Systems
- Manual Fire Alarm Pull Station
- Fire Suppression Systems
- Portable Fire Extinguishers

FIRE AND LIFE SAFETY TRAINING

The best way to avoid a fire is to be knowledgeable of fire hazards and how to prevent them. The Risk Management and Safety Office will be available to provide training to Commission employees.

New Employees	Supervisors are required to review fire hazards and emergency procedures with new employees
All Employees	Fire and life safety training will be available to all employees.

PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers (PFE's) are to be located in buildings and other areas throughout the Commission as needed. When used properly, a PFE can save lives and property by putting out a small fire or containing it until the fire department arrives. Fire extinguishers however, are not designed to fight a large or spreading fire but can be used to allow personnel to safely exit a burning building. Employees are expected to evacuate the building. However, if you are properly trained to use an extinguisher and can evaluate the situation and extinguish a fire safely with no personal risk, then you may attempt to do so.

HOT WORK PERMITS

Fire Prevention and Suppression Procedures for Hot Work Operations

If not properly controlled, hot work operations present serious fire hazards that can lead to significant property damage, injury and/or loss of life. To ensure safe hot work activities the following procedures have been established. These procedures apply to all work performed on all Commission property.

Policy for Work Performed Outside a Designated Area and/or Temporary Operation

A Hot Work Permit must be issued for any temporary operation that may produce high heat, sparks, and/or open flames. These operations include, but are not limited to, the use of open flames, compressed gases or supplied fuel burning, brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing, and welding.

Procedure to secure a Hot Work Permit:

1. Any Commission employee performing work requiring a Hot Work Permit must secure the permit **BEFORE** any work is to begin. This will require advance notice. A Hot Work Permit can be obtained from the

- supervisor of the department conducting the work.
2. Hot Work shall not begin until the work site has been inspected and the supervisor issuing the permit has signed the Hot Work Permit. All applicable safety precautions listed on the permit must be followed at all times during the hot work operation.
 3. Persons doing Hot Work must indicate on the permit a start time and expiration date. The permit must be posted in plain view at the Hot Work location during the entire operation. After the Hot Work is completed the permit must be returned to department supervisor and a copy forwarded to the Risk Management and Safety Office.
 4. It is important that the permit specifically states the location and start time of the hot work.
 5. Long-term jobs (of more than one workday) may have a permit issued for each work week. If the work extends beyond the initial completion date, another permit must be secured for the additional time period.

Policy for Work Performed in Shops and Other Designated Hot Work Areas

Commission departments that perform hot work on a routine basis in a permanent shop or other designated work site will be exempt from the above permit requirements. **Supervisors and work leaders must ensure that such work spaces are maintained in a safe condition and that safe work practices are adhered to at all times.** The Risk Management and Safety Office will perform periodic workplace inspections and make recommendations as needed.

EMERGENCY PROCEDURE TRAINING

As each department develops and maintains their Emergency Action Plan, employees must receive training on all elements of this plan. New employees must receive training when first assigned to the Department. Additional training is necessary when an employee's responsibilities under the plan change, or when there are changes to the facility and/or the plan.

Public Assembly Emergency Procedures Training for Employees and Volunteers

Employees and/or Volunteers must be trained in site-specific emergency evacuation procedures and practice this training during drills, which must be conducted at least twice annually, at a minimum.

Appendix A: (Optional)

The Maryland National Capital Park and Planning Commission

Fire Extinguisher Inspection Monthly Checklist

Facility: _____

Fire extinguishers require inspection on a monthly basis according to OSHA and state safety regulations. The Maintenance department is required to perform a more comprehensive check on an annual basis. The following is a list of items to check when performing a monthly inspection:

- Extinguisher should be in designated location (mounted and on bracket) with proper sign in place to note extinguisher location for easy access in emergency
- Access is maintained (keep all items away from extinguisher)
- Pin is in place and tab is not broken
- The charge indicator (if present), should be in full range (green area)
- No indication of physical damage
- Inspection is documented – initial the tag on the extinguisher (month/year box)

EXTIGUISHER LOCATIONS

FLOOR	LOCATION	CONDITION	DATE INSPECTED	DATE REPLACED (REPLACE IMMEDIATELY)	INITIALS
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Conducted by: (Print Name) _____

Signature: _____

Date _____

SECTION 5.10 Forestry and Tree Maintenance

The Commission has implemented this Directive for forestry and tree maintenance. It complies with Title 29 Code of Federal Regulations (CFR) §1910.266 Logging Operations, and The American National Standards Institute (ANSI) Z133.1-1994, “Standard for Tree Care Operations – Pruning, Trimming, Repairing, Maintaining and Removing Trees and Cutting Brush Safety Requirements”.

PURPOSE

The purpose of this Directive is to ensure that employees are protected from the hazards associated with pruning, trimming, repairing, maintaining and removing trees and brush.

APPLICABILITY

The Directive applies to all Commission employees exposed to the hazards associated with pruning, trimming, repairing, maintaining and removing trees and brush.

DEFINITIONS

Aerial Devices refers to the following types of vehicle-mounted lifts used to elevate personnel to job sites above the ground:

- Extensible boom platforms
- Aerial ladders
- Articulating boom platforms
- Vertical towers

Backcut (felling cut) means the cut made in a tree limb or tree trunk on the side opposite the intended direction of fall.

Ballistic Nylon is a nylon fabric of high tensile properties designed to provide protection from lacerations.

Buck means to cut a felled tree into logs.

Butt refers to the bottom of the felled part of a tree.

Chock means a block, often wedged shaped, which is used to prevent movement; a log from rolling, a wheel from turning.

Competent Person is an individual who is capable of identifying existing and predictable hazards in the surrounding or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

Danger Tree is a standing tree that presents a hazard to employees due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem or limbs, and the direction and lean of the tree.

Deck is a stack of trees or logs.

Designated Person is an employee who has the requisite knowledge, training and experience to perform specific duties.

Dielectric is nonconductive of electrical current.

Domino Felling refers to the partial cutting of multiple trees, which are left standing and then pushed over with a pusher tree.

Drop Started is the act of starting a chain saw by pushing the saw away from the body with one hand while simultaneously pulling on the starter cord handle with the other.

Electrical Conductor refers to an overhead or underground electrical device, including communications wires and cables, power lines and other such facilities.

Fell (fall) means to cut down trees.

Feller (faller) is an employee who fells trees.

Ground Personnel refers to a worker or workers assigned to assist and carry out tree work activities on the ground.

Handlines, Taglines (groundlines) are ropes used for lifting, lowering, or guiding limbs or equipment, or both, into or out of a tree.

Leg Protection refers to a garment designed to provide protection to the legs during chain saw operations.

Limbing refers to cutting branches off felled trees.

Mushroomed refers to a condition that develops from constant hammering on the heads of the chisels and wedges that causes the metal to spread outward, fold under and splinter off.

Outrigger is a built-in device used to stabilize cranes, aerial lifts, and similar equipment.

Qualified Person is one who, by possession of a recognized degree, certificate, or professional standing, or who, by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.

Undercut refers to a notch cut in a tree to guide the direction of the tree fall and to prevent splitting or kickback.

Yarding refers to the movement of logs from the place they are felled to a landing.

GENERAL SAFETY REQUIREMENTS

All equipment and devices shall be properly maintained and operated according to the manufacturers guidelines and instructions. All equipment, including ropes and lines shall be inspected and maintained daily prior to use by the employees using them.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Commission shall provide all employees who are exposed to hazards where there is reasonable probability of injury or illness with the necessary personal protective equipment (PPE).

Employees shall inspect their PPE before initial use for any defects and damage. Any damaged or defective PPE shall be taken out of service and replaced immediately.

All employees shall receive PPE training according to the Commission's Personal Protective Equipment Directive.

Specific Personal Protective Equipment

- **Head Protection:**

Employees engaged in tree operations shall wear approved hard hats. Hard hats shall be Class B rated due to work in proximity to an electrical conductor.

- **Eye Protection:**

Employees engaged in tree operations shall wear approved safety glasses.

- **Face Protection:**

Employees engaged in sawing and chipping operations shall wear approved face protection.

- **Leg Protection:**

Employees engaged in tree operations shall wear approved leg protection constructed with cut-resistant material, such as ballistic nylon or Kevlar.

- **Foot Protection:**

Employees engaged in tree operations shall wear approved heavy-duty boots that are waterproof or water repellent and cover and support the ankle.

Employees operating a chain saw shall wear approved foot protection that is cut-resistant to provide protection against a running chain saw.

- **Hand Protection:**

Employees engaged in tree operations shall wear approved hand protection, which provides adequate protection from puncture wounds, cuts and lacerations.

- **Hearing Protection:**

Employees operating a chain saw or chipper shall wear approved hearing protection.

- **Fall Protection Equipment:**

- Saddles:

Tree climber's saddles shall be worn to protect all tree climber's above ground

Tree climber's saddles shall have drop forged support dee rings.

Tree climbing saddles and lanyards shall not be weakened by the addition of extra holes in the equipment.

- Tree Climbing Snaps and Carabineers:

All snaps used in climbing shall be the self-closing locking type with a minimum tensile strength of 5,000 lbs.

Carabineers shall not be used to tie climbing lines into tree climbing saddles.

o Climbing Lines:

Climbing lines shall have be at least ½ in diameter, be constructed of a synthetic fiber with a minimum tensile strength of 5,000 lbs.

Climbing lines shall not be used to lower limbs or other parts of trees.

Climbing lines shall be identified for tree climbing by the manufacturer.

Climbing lines shall not be repaired using splicing techniques.

Personal Protective Equipment shall comply with all ANSI standards.

Fall Protection Requirements

The use of fall protection equipment is required when the operator enters the bucket and begins to elevate, regardless of height.

The minimum level of fall protection for the bucket truck is a full body harness and lanyard, which shall be 2' in length.

Attachment points for bucket trucks shall be capable of withstanding 5,000 pounds and shall be maintained where designated by the manufacturer.

Additional fall protection and safety requirements:

- Employees shall not place any item into the bucket for the purpose of increasing work height.
- When using the articulating boom on a permitted incline, the bucket shall be located on the upgrade side and in a stable position.
- Hard hats are required for all bucket truck operators.

See the Commission's Fall Protection Directive for additional requirements.

NOISE

The Commission shall take the appropriate measures to suppress noise levels where they exceed the acceptable standards. When it is not possible to decrease the noise level or isolate the workers from it, the employees shall wear effective hearing protection as provided by the Commission.

SIGNALING and SIGNAL EQUIPMENT

Hand signals or another form of audible contact shall be used whenever noise, distance, restricted visibility, or other factors prevent clear understanding of normal voice communications between employees. Whistles, horns or radios are an acceptable means of audible contact when hand signals are not effective.

FIRST AID PROCEDURES

The Commission shall provide first-aid kits at each work site where trees are being cut or on the aerial truck on site.

All tree crew employees shall be trained and certified in first-aid and CPR.

All tree crew employees shall be instructed in the identification of, and preventative measures related to, poison ivy, poison oak and poison sumac.

FIRST AID KITS

The contents of the first aid kits listed is adequate for small work sites, consisting of two or three employees. Larger operations or multiple operations will require additional first aid kits and or supplies.

Each first-aid kit shall contain at least the following items:

First Aid Kit	
Gauze pads (at least 4x4 inches)	Scissors
Two large gauze pads (at least 8x10 inches)	Blanket
Box of fifty (50) adhesive bandages	Tweezers
One package of gauze roller bandage at least 2-inches wide	Adhesive Tape
Two triangular bandages	Latex Gloves
Wound cleaning agent (moist towelettes)	CPR pocket mask
Directions for requesting emergency assistance	

WORK ZONE SAFETY and TRAFFIC CONTROL

Operators of aerial personnel lifts are responsible for ensuring traffic safety anytime the lifts are used on paved surfaces accessible by motor vehicles, bicycles and foot traffic

Special planning for traffic control is necessary on a case-by-case basis. Work that takes place either on or near the roadway creates a potentially hazardous situation, which shall require the use of traffic controls.

It is the responsibility of the person in charge or their designee to establish and maintain safe and effective controls.

Before going to the work site a traffic control plan should be developed. The control plan addresses the need for traffic control devices and personal protective equipment for the employees working on the site.

Maintenance work that takes place either on or near the roadway creates a potentially hazardous situation, which shall require the use of traffic controls.

All necessary traffic control devices shall be installed before maintenance work begins and must be maintained during the entire work period.

Traffic control devices (signs, barricades and cones) provide drivers with sufficient advanced warning, provide proper protection for the motorists and our employees and advise the motorists of the travel path.

Only the necessary vehicles should park at the site. Those vehicles should be parked in areas that provide safe entrance and exit to and from the site. The vehicles should not create potential conflicts with other vehicles/equipment operating in the work area.

All vehicles/equipment in work area should be parked on the same side of the road.

All employees should work facing traffic. If this not practical then a lookout should be provided. Employees should be alert of the job site hazards and should identify the appropriate escape routes.

All traffic control devices should be removed in a timely manner and in a manner that provides employees the most protection.

Avoid working during peak hours on high volume traffic routes.

See the Commission's Aerial Personnel Lift Directive for additional requirements.

Safety Vests

Safety Vests shall be provided for all employees who are responsible for traffic safety and cone placement. The safety vests shall meet the ANSI/ISEA 107-1999 Standard. The standard requires that safety vests be provided to employees working in or close to roadways.

Safety Vests fall into the following Classes:

Class I

Garments for workers who have ample separation from vehicular traffic that does not exceed 25 mph. Class I garments are typically safety vests and are recommended for workers in warehouses with equipment traffic, sidewalk maintenance workers and delivery vehicle drivers.

Class II

Garments intended for users who need greater visibility in poor weather conditions and whose activities occur near roadways where traffic speeds are between 25 mph and 50 mph. This class of garment is suitable for most tree crew operations (keeping in mind the speed limit of the roadway).

Class III

Garments providing the highest level of visibility to workers in high-risk environments that involve high task loads, a wide range of weather conditions and traffic exceeding 50 mph. Class III garments, which provide coverage to the arms and/or legs as well as the torso include pants, jackets, coveralls or rain wear. These garments are recommended for all roadway crews, vehicle operators (mowing operations), utility workers, survey crews, emergency responders, and accident site investigators.

ANSI 107-99 Safety Vest Standards

Requirement	Class III garments	Class II garments	Class I garments
Background material	1240 in ² (0.80 m ²)	775 in ² (0.50 m ²)	217 in ² (0.14 m ²)
Reflective material	310 in ² (0.20 m ²)	201 in ² (0.13 m ²)	155 in ² (0.10 m ²)
Photometric performance	Level 2	Level 2	Level 2
Combined performance	N/A	N/A	310

CONE PLACEMENT

When Parked:

- Place a cone at the rear of the vehicle when the truck will be backed up or out of a parking spot.
- Place a cone at the front of the vehicle when the truck will be driven forward.

When on a roadway work site:

- A minimum of 4 cones shall be placed behind and 3 in front of the bucket truck when use in the street is required.
- A distance of ten (10) feet must separate each cone.

See Appendix A – Cone Placement Diagram.

FIRE PROTECTION

The Commission shall provide at least one 10lb. ABC rated fire extinguisher for each vehicle involved in forestry and tree maintenance operations.

Gasoline powered equipment shall be refueled after the engine has stopped and cooled. If any fuel is spilled on the equipment it shall be removed and the area cleaned prior to the equipment being restarted.

Gasoline powered equipment shall not be operated within ten (10) feet of any refueling operation or in an area where refueling has taken place.

Diesel powered machines and vehicles may be fueled while they are at idle, provided that continued operation is intended and that safe fueling and operating procedures are followed.

All flammable liquids shall be stored and dispensed from approved safety containers that have a pressure release handle and a flash suppression screen.

Flammable liquids shall not be transported in the driver compartment or in any passenger occupied area of a machine or vehicle.

Smoking is strictly prohibited in areas where flammable liquids are being used in power tools and where they are being handled or stored.

Employees wearing clothing that has come in contact with flammable liquids shall avoid open flame and other ignition sources. They shall change their clothing as soon as possible.

ENVIRONMENTAL CONDITIONS

Work operations shall stop and each employee shall move to a safe place during an electrical storm, periods of high winds, or during other hazardous weather conditions.

Seasonal environmental conditions shall be recognized and managed. These seasonal environmental conditions can create a hazard for the employee in the performance of the job. Examples include but are not limited to, snow, ice, rain, wind, heat, cold, fog and darkness.

TREE HARVESTING and WORK AREAS

General Requirements

Trees shall not be felled in a manner that will create a hazard for an employee.

Employees shall be spaced and the duties of each employee shall be organized so the actions of one employee will not create a hazard for any other employee.

The work areas shall be assigned so that trees cannot fall into an adjacent occupied work area. The distance between adjacent occupied work areas shall be a least two (2)-tree lengths of the trees being felled.

A distance of greater than two (2) tree lengths shall be maintained between adjacent occupied work areas if there is a slope where felled trees could roll or slide down the slope.

Domino felling of trees is prohibited.

When evaluating the distance needed between adjacent occupied work areas, the following should be taken into consideration:

- The degree of slope
- The density of the growth
- The height of the trees
- The soil structure

The feller shall plan and clear a retreat path. The retreat path shall extend diagonally away from the expected felling line.

When the tree starts to fall the feller shall walk away on the pre-selected and cleared escape path. The saw shall be at idle speed and the chain brake engaged. The feller shall watch the falling tree and be alert of falling limbs and other flying debris that may cause injury.

The feller shall evaluate the condition of the tree; the lean of the tree, dead limbs and the weather conditions to ensure that felling the tree does not create an additional hazard for any employees.

An undercut shall be made in each tree being felled, unless the undercut will create a hazard for an employee.

A backcut shall be made for each tree felled. The backcut shall leave sufficient hinge wood to hold the tree to the stump during most of its fall.

A backcut shall be above the level of the horizontal facecut in order to provide an adequate platform to prevent kickback.

Each employee performing these operations shall work in a position or location that is within visual or audible contact with another employee.

Each employee shall be accounted for after the work operations are completed.

MOBILE EQUIPMENT

General Requirements

Only trained and qualified employees shall operate the equipment.

All vehicles and equipment shall be operated in accordance with the manufacturer's guidelines and safe operating instructions.

Employees shall wear seat belts when a vehicle is in motion.

Equipment shall be turned off and the keys removed before any repairs or adjustments are made.

Equipment shall not be placed back in service until all defects or malfunctions have been repaired, thus assuring safe operation of the equipment.

All trucks with obscured or limited rear vision shall only be backed-up when absolutely necessary. If it is necessary to back-up the vehicle, then an employee shall assist the driver back into the desired location.

Employees shall not ride outside the vehicle passenger compartment.

Hoisting and lifting equipment shall not be used to lift more than its rated capacity according to the manufacturer's specifications.

Pads shall be set under the outrigger feet each time the outriggers are extended.

The operator shall ensure the outriggers are set on stable footing.

The operator shall provide a warning to the other employees on the crew warning them that outriggers are being lowered.

Employees shall follow the manufacturer's instructions for detecting hydraulic leaks and shall never try to locate hydraulic leaks by feeling for them.

The ignition keys shall be removed from the vehicle when it is left unattended.

AERIAL PERSONNEL LIFTS

All aerial personnel lifts shall be inspected before the initial use. All defects and damage shall be repaired or the vehicle shall be taken out of service until the necessary repairs have been made.

Each operator shall have a valid operator's license for the class of vehicle being operated.

Only trained employees who have been designated by their supervisor are authorized to operate aerial personnel lifts.

Only a crew of two or more shall operate aerial personnel lifts. One employee is responsible for staying on the ground and operating the lift in case of an emergency.

Employees shall follow the manufacturers instructions for the safe operation of the aerial lift.

A copy of the user's manual shall be kept in the vehicle at all times as a required guide. The manual shall be placed in the compartment closest to the base controls for the aerial platform.

Employees shall not belt off to any adjacent pole, structure, or equipment while working from an aerial lift.

Employees shall not wear climbers while performing work from an aerial personnel lift.

Lift controls shall be tested prior to use to determine that such controls are in safe working condition.

Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

When operating an aerial lift, the operator shall look in the direction of travel of the bucket and be aware of the booms in relation to all other objects and hazards.

When these lifts are operated over road, the clearances from passing vehicles shall be maintained or traffic control shall be provided.

Employees shall not be permitted to use an aerial personnel lift as a means of access. In the event that there are no other means of access, specific procedures including rationale feasibility, duration, evacuation, fall protection, etc., shall be developed and reviewed with affected employees prior to implementation.

Large or excessive amounts of material, excluding tools, shall not be transported in an aerial personnel lift. Other material lifts would be necessary for such activities.

Load limits specified by the manufacturer shall not be exceeded.

(Except for scissor-lifts) aerial personnel lifts that can operate horizontally shall have the brakes set and the outriggers fully extended, when used, be positioned on pads or a solid surface, and wheel chocks in place before use on an incline.

An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment that is specifically designed for this type of operation.

Wheel chocks shall be set in place before using an aerial lift, unless the lift has no wheels on the ground.

All hoses affecting the dielectric characteristics of equipment shall meet the manufacturer's specifications.

Holes shall not be drilled in the bucket or liner that would reduce the dielectric integrity.

Dielectric inspections shall be conducted on an annual basis.

BOOM LIFTS

Before ladder trucks and tower trucks are moved from site to site the aerial ladders shall be secured in the lower traveling position by the locking device above the truck cab, and the manually operated device at the base of the ladder, or by other equally effective means (e.g., cradles which prevent rotation of the ladder in combination with positive acting linear actuators).

An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment that is specifically designed for this type of operation.

Articulating boom and extendible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

Insulated aerial devices shall not be altered in any manner that might reduce its insulating value. The insulated boom of a lift shall be regularly maintained and certified to ensure the contained insulating properties.

Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and the outriggers are in the stowed position.

Required Equipment for Aerial Platform and Boom Trucks

All aerial personnel lift vehicles shall have the following equipment and materials on board at all times:

- User's Manual
- Chock blocks (2)
- Fire Extinguisher (1) (10lb. ABC)
- Traffic cones with reflective stripes (12)
- First Aid Kit (1)
- Full Body Harness (1)
- Lanyard (1) > 2' in length

VEHICLE SAFETY CHECK

The operator of the aerial personnel lifts and boom trucks shall conduct a safety check/inspection prior to vehicle use to determine hazards and identify damage. The safety check/inspection shall include the following items:

- Visual inspection of the exterior
- Broken, damaged, loose or missing parts
- Tire bulges, cuts and pressure
- Oil and hydraulic fluid leaks
- Weld integrity (cracks and rust)
- Lighting (beam, directional and safety)
- All required decals and stickers on or around the boom (must be in place and legible)

EQUIPMENT

Brush Chippers

The operator shall conduct a pre-start walk around inspection of the machine each day before it is used, checking the following:

- All nuts, bolts and belts to make sure they are tight
- The infeed, to make sure nothing is obstructing the opening
- All hydraulic hoses for loose fittings or leaks, making sure the hoses aren't frayed

- All hydraulic fittings and functions
- All fluid levels, including engine oil, radiator fluid, hydraulic oil and fuel to make sure they are at appropriate levels.

Always remove the ignition key before servicing the chipper.

Check knives for sharpness and cracks. When performing knife maintenance, always wear proper gloves and use lock pins or drum wedges where they apply.

Open the chipper hood, roll the drum or disk to inspect the knives and when finished, close the hood, put the pin in place, making sure it is secured properly.

Check the function of the safety bar to be sure it moves properly to forward, reverse and neutral.

Make sure the discharge chute is pointed in the proper direction, away from buildings, bystanders and operators.

Wheel chocks should be placed under both wheels to keep the chipper from moving.

Chipper Operation Safety:

Safe operation of the chipper is crucial.

Each rotary drum tree or brush chipper or disk-type tree or brush chipper not equipped with a mechanical infeed system shall be equipped with an infeed hopper not less than 85 inches, measured from the blades or knives to ground level over the centerline of the hopper, and shall have sufficient height on its side members so as to prevent personnel from contacting the blades or knives of the machine during normal operations.

Each rotary drum tree or brush chipper or disk-type tree or brush chipper not equipped with a mechanical infeed system shall have a flexible anti-kickback device installed in the infeed hopper for the purpose of protecting the operator and other persons in the machine area from the hazards of flying chips and debris.

All brush chippers shall be equipped with a locking device on the ignition system to prevent unauthorized starting of the equipment

Each disk-type tree or brush chipper equipped with a mechanical infeed system shall have a quick stop and reversing device on the infeed. The activating lever for the quick stop and reversing device shall be located across the top, along each side of, and as close to the feed end of the infeed hopper as practicable and within easy reach of the operator.

Brush for the chipper should be stacked in a way that makes it easy and convenient for the operator to feed the chipper. The butt-ends of the brush should face the chipper infeed. Place the brush stacks at a good distance from the chipper to allow the operator a clear path.

Before starting the chipper, make sure the clutch is disengaged, the safety control bar is in neutral, all personnel are clear of the machine and the chip discharge chute is pointed in a safe direction.

When starting the machine, always idle the engine to warm it up, engage the clutch and then raise the engine RPM to full throttle.

The operator shall always make sure the chipper is at full throttle when chipping to insure proper discharge of material and to avoid plugging problems.

Never operate the chipper alone. There must be at least two people on-site, with one person operating the control bar at all times.

Operators should never operate the machine while under the influence of drugs or alcohol or while taking medication that may impair the operator's ability to concentrate.

Feed the brush into the chipper butt-end first.

The operator should never, under any circumstances, place their feet or hands in the infeed chute while the machine is running. An operator should never, for any reason, kick brush in with their feet. To safely feed short material, always lay the short material on top of longer material that is feeding.

Never attempt to feed handfuls of twigs, leaves and other material that has been raked up. This material should be placed in the chip van or chip pile directly. Not only is it dangerous to feed the material, but it can contain rocks, metal and other material that can damage the chipper.

Always examine the brush pile for foreign objects before chipping.

Remove the ignition key when the machine is left unattended.

Chipper Maintenance and Care Safety:

Proper maintenance is key to keeping a chipper in excellent condition. As important as maintenance upkeep is to the chipper, it is equally important to perform all maintenance in a safe manner.

Never attempt to unclog a chipper or perform any type of maintenance while the chipper is running.

Before performing any maintenance, turn off the engine and remove the ignition key.

Let the disk or drum come to a complete stop before opening the chipper housing.

The chipper disk or drum will coast for several minutes after the machine is shut off. The operator can determine that the disc or drum has stopped by viewing the chipper bearings for rotation.

Once it has stopped coasting, make sure all locking devices are in their proper place before performing maintenance, in particular the disk or drum lock pin and the feed-wheel lock pin, if access through the feed system is required.

When refueling, make sure there is no open flame or source of a spark in the vicinity of the machine.

Stump Cutters

All stump cutters shall be inspected prior to use.

Operators shall follow the manufacturer's instructions for safe operation.

Stump cutters shall be equipped with enclosures that will reduce the risk injury to the operator or others.

Gasoline Driven Power Saws (Chain Saws)

All chain saws shall be inspected prior to use.

The operator shall conduct a pre-start inspection of the chain saw each day before it is used, checking the following:

- All saw handles and guards are in place and tight
- All saw controls function properly
- The saw chain is properly adjusted and filed
- The muffler is operative
- The chain catcher is in place and undamaged
- The chain brakes and other manufacturer's safety features remain operational

All chain saws shall meet the requirements of the ANSI B175.1-1991 "Safety Requirements for Gasoline-Powered Chain Saws" Each chain saw shall be equipped with a kick back device that minimizes chain saw kickback.

Operators shall follow the manufacturer's instructions for safe operation.

Each gasoline-powered chain saw shall be equipped with a continuous pressure throttle control system, which will stop the chain when pressure on the throttle is released.

The chain saw idle speed shall be adjusted so that the chain will not continue to rotate after the throttle is released.

Chain saws shall **not** be re-fueled within twenty (20) feet of any ignition sources.

Chain saws must be started at least ten (10) feet away from the fueling area.

Operators shall have secure footing when starting a chain saw.

Chain saws shall be started on the ground or otherwise firmly supported. Chain saws weighing less than 15 lbs. can be drop started.

A separate line shall support chain saws weighing more than 15 lbs., unless they are being used from an aerial device.

Chain saws weighing more than 15lbs. are permitted outside of the bucket of an aerial lift only after ensuring that the area below the lift is clear of personnel and other equipment.

Chain saws shall only be started and operated when all personnel are clear of the saw.

Chain saws shall not be used to cut directly overhead.

When moving from tree to tree the chain brake shall be set, the fingers shall be removed from the trigger and the bar kept away from the body.

Chain saws shall be shut down or the chain brake shall be engaged whenever the saw is being carried further than 50 feet.

Chain saws shall be shut down or the chain brake shall be engaged when the saw is carried less than 50 feet if hazardous conditions exist.

All cutting shall be done at high engine speed (full throttle) particularly at the start of the cut.

All cleaning, refueling, adjustments and repairs to chain saws can only be conducted when the engine of the power saw is stopped.

Chain saws shall be cleaned according to the manufacturer's instructions and maintenance schedule.

Pruners and Pole Saws

All pruners and pole saws shall be inspected prior to use.

All pole pruners, pole saws and other similar tools shall be equipped with wood handles or non-metallic poles. The actuating cord shall only be made of a non-conductive material (i.e., polypropylene line).

Wedges, chisels and gouges

All wedges, chisels and gouges shall be inspected for cracks and damage prior to use.

All wedges and chisels shall be properly pointed and tempered.

Wedges and chisels with mushroomed heads shall not be used. They shall be pulled from service and repaired or replaced.

Ladders

Commission tree crews shall follow the requirements in the Ladder Safety Program and the specific ladder selection criteria listed below.

Ladder Selection Criteria

The following table outlines the weight-capacity classifications for approved ladder types:

ANSI TYPE	APPLICATION	MATERIAL	WORKING LOAD
1AA	Field/Construction/Service/Shop/Warehouse	Fiberglass	375lbs. Maximum
1A	Field/Construction/Service/Shop/Warehouse	Fiberglass	300 lbs. Maximum

Only ANSI type 1AA and 1A ladders are approved to be used by Commission employees

Any future-developed ladder with a rating higher in "working load" capacity than the ANSI type 1AA is acceptable.

Material

Fiberglass: Fiberglass ladders are the leading choice of all materials. These ladders are strong, durable, non-conductors of electricity, non-corrosive and relatively lightweight. These ladders are the best choice when working with or around electricity.

Commission Tree Crews shall use only fiberglass ladders.

TRAINING

Employees shall receive safety training prior to their initial assignment, when they are assigned new work tasks, tools, equipment, machines, or vehicles and when they exhibit unsafe job performance.

Training shall consist of the following elements:

- Safe use, operation and maintenance of tools, machines and vehicles
- Recognition of safety and health hazards, including measures and work practices to prevent or control the hazards
- Proper work site procedures and practices

Certification of Training

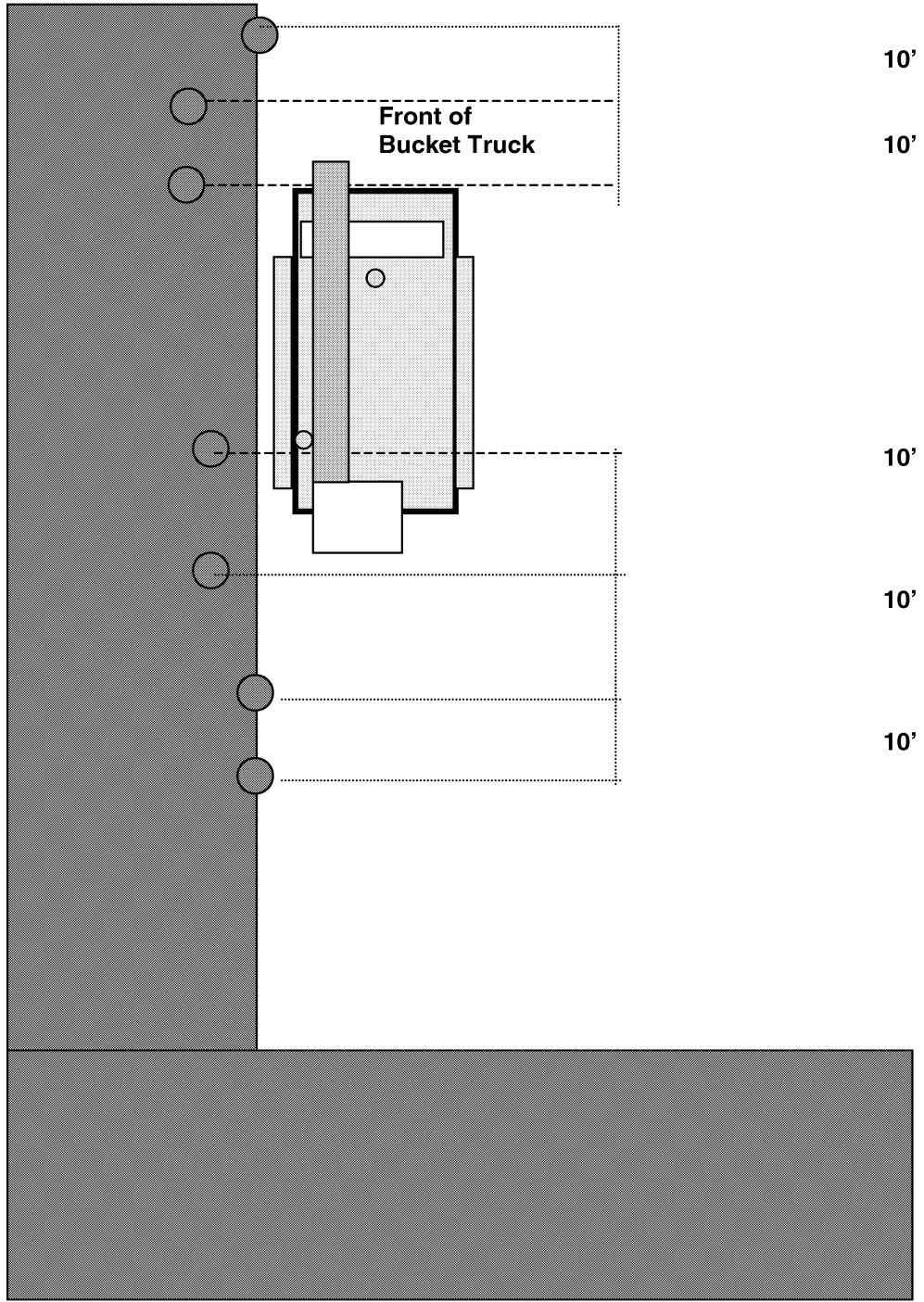
The Commission shall verify compliance with the training requirements for forestry and tree maintenance by preparing a written certification record. The following information shall be documented with the certification:

- Name of each employee
- Date(s) of training
- The signature of the person who conducted the training

Appendices:

Appendix A – Cone Placement

Appendix A – Cone Placement Diagram



SECTION 5.11

Grounds Maintenance

The Commission has implemented this Directive for grounds maintenance that complies with Title 29 Code of Federal Regulations (CFR) §1910.243; Power Lawnmowers, §1910.212; General requirements for all machines, ANSI B71.4-1999, Safety Specifications for Commercial Turf Care Equipment, the United States Consumer Product Safety Commission and the manufacturers guidelines.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of grounds maintenance equipment.

APPLICABILITY

The Directive applies to all Commission employees required to use grounds maintenance equipment to perform their assigned work duties.

SAFE OPERATING PRACTICES for GROUNDS MAINTENANCE EQUIPMENT

Basic Safety Guidelines:

- Read and understand the equipment operator's manual
- Use the right equipment for the job
- Inspect the equipment prior to use
- Know how to control and stop the equipment quickly
- Wear the appropriate personal protective equipment

Operator's Manual

Operator's manuals have detailed information on the correct way to operate the equipment, how to dress appropriately when operating it, and how to service and maintain the equipment.

Each employee shall thoroughly read the operator's manual for the equipment they are going to operate prior to their assignment to operate the equipment. They shall be provided the opportunity to discuss the operating procedures with their supervisor prior to operating the equipment.

The operator's manual shall be kept in a location where it is accessible to the operators of the equipment so that they can refer to it as necessary.

Know the Machine

Operators shall be trained on how to conduct a safety inspection of the equipment, how to document any deficiencies and who to notify of the deficiencies.

New operators shall be allowed to operate the equipment in a controlled environment for general experience. This shall take place prior to receiving an assignment to operate the equipment in the field.

All operators shall know how to stop the equipment quickly. As part of the safety inspection the operator shall check the operation of the blade-stopping feature (either the blade brake clutch or an engine kill switch).

SAFETY FEATURES

DO NOT DISABLE ANY SAFETY FEATURE

Check the safety guards and devices, such as discharge chutes and rollover protection systems, to ensure they are in proper working condition.

All guards, shields, deflectors and warning decals shall be on the equipment for the protection of the operators and bystanders.

If any safety feature is lost or damaged, or a decal becomes illegible, the employee shall discontinue the use of the equipment until the damaged or missing parts or the illegible decal are repaired or replaced.

All safety features shall be inspected as part of the daily safety inspection of each piece of equipment.

DAILY INSPECTIONS

All power grounds maintenance equipment shall be inspected daily by the operator before the use.

The safety inspection shall include a check of all fluid levels, including those in the engine, hydraulic and cooling systems. All debris shall be cleaned off the equipment.

Ensure that all belts, pulleys and guards are in good working order and that the tires are filled to proper air pressure.

INSPECT THE WORK AREA

The work area shall be clear of all hazards that could be thrown from the ground maintenance equipment. The equipment operator shall be responsible for making sure the work area is free from trash, rocks, wires, broken glass, sticks and other forms of debris that could be thrown by the grounds maintenance equipment.

PERSONAL PROTECTIVE EQUIPMENT

Employees shall wear the appropriate personal protective equipment for the work operations they are conducting.

Safety begins with the clothing employees wear to when they operate equipment.

Clothing protects the operator from thrown objects and sun exposure. Loose fitting clothing and jewelry should be avoided in order to eliminate the possibility of the operator being pulled into the piece of equipment. The following is a list of appropriate clothing to wear while operating equipment:

Close-fitting clothes and long pants, short pants (**if approved**), hearing and eye protection, safety work boots and gloves.

HEADSET RADIOS

The use of Walkman-type radios is not permitted during ground maintenance operations.

HANDLING GASOLINE and other FLAMMABLE LIQUIDS

Gasoline and other flammable liquids are used to power the grounds maintenance equipment used by the Commission.

All flammable and combustible liquids shall be handled and stored properly. These safety practices shall be followed when handling flammable liquids:

- Store gasoline in an approved safety can with a pressure release handle and a flash suppression screen
- Fill equipment prior to starting
- Fill the gas tank only $\frac{3}{4}$ full; gasoline expands due to heat
- Avoid spilling gasoline and flammable liquids when filling the equipment
- Soak up gasoline spills immediately with a rag or absorbent. Dispose of the rag/absorbent according to the material safety data sheet
- Do not refill the equipment when the engine is hot
- Do not remove the gas cap when the engine is running
- Never store gasoline in glass or unapproved containers
- Place portable fuel containers on the ground during filling, and keep the metal spout in contact with the container to prevent build-up and discharge of static electricity
- Never fill a container in the bed of a pick-up or back of any other vehicle.
- Do not smoke near gasoline
- Do not get near fires with gasoline

MACHINE GUARDING

One or more methods of machine guarding shall be provided to protect the operator and other employees in the work area from the hazards such as those created by the point of operation, ingoing nip points and rotating parts.

The manufacturer installs the necessary guards on the grounds maintenance equipment. If these guards are damaged or missing the equipment shall not be used until they are replaced.

POWER LAWNMOWERS

Know your surroundings

Always stay alert while operating power lawnmowers. If a person or animal approaches the cutting area the operator shall stop the equipment and turn off the engine while the person or animal is in the cutting area. Cutting operations shall only be resumed when the cutting area is clear.

Deflection Chute

Keep the deflection chute free from debris. The deflection chute can become clogged with grass clippings and other debris while mowing. Use extreme caution when unclogging the deflection chute. Turn off the engine and make sure the blades have stopped turning. Disconnect the spark plug wire and use a tool or stick to clear away the grass clippings. Disconnecting the spark plug wire will eliminate the accidental starting of the blades when unclogging the discharge chute.

Maintain Control

Maintaining control of the equipment is a very important part of the operator's job. Proper control of the equipment can significantly reduce the chances of being injured. One of the best ways to maintain control of the equipment is to establish good traction and cut on stable ground. Operators shall wear sturdy safety work boots with thick, treaded soles, which will help establish good traction.

POWER LAWNMOWERS

General Requirements:

All power-driven chains, belts and gears shall be positioned or guarded to prevent the operator from coming in contact with them during normal starting, mounting and operation of the mower.

Each mower shall be equipped with a shutoff device to stop the engine. The shutoff device shall operate on a manual and intentional reactivation to restart the engine.

All operating controls shall be clearly identified.

Walk-behind and Riding Rotary Mowers

General Requirements

The mower blade shall be enclosed except on the bottom and the enclosure shall extend to or below the lowest cutting point of the blade in the lowest position.

Openings in the blade enclosure for the discharge of grass shall be limited to a maximum vertical opening of 30°. The degree measurement shall be taken from the lowest blade position.

The total opening area of the grass discharge opening(s) shall not exceed 1,000 square degrees on mowers having less than 27½ inches of cutting width and 2,000 square degrees on mowers having more than 27½ inches of cutting width.

Each mower shall have a warning sign using the word "Caution" or stronger language placed at or near the grass discharge opening.

The mower blades shall stop rotating from the manufacturer's specified maximum speed within 15 seconds after declutching or shutting off power.

The maximum tip speed of any mower blade shall be 19,000 feet per minute.

CUTTING SLOPES

Using power lawnmowers on steep and rough terrain is difficult and hazardous. The general rule for operating walk-behind mowers on slopes is to move across the cutting area. The mower shall be pushed forward across the slope and never pulled backwards toward the operator.

Safety Guidelines for Walk-behind Lawnmowers:

- Wear the required safety work boots
- Never bypass the manufacturer's safety devices
- Mow across slopes and rough terrain
- Work slowly when cutting tall grass or tough weeds
- Never leave a running lawnmower unattended
- Always keep the deflection chute pointed away from buildings, vehicles and people
- Never tilt a lawnmower; always keep all four wheels on the ground

Riding Mowers

These mowers shall be operated up and down steep slopes in rough terrain to reduce the chance of the mower overturning. A riding mower may overturn if the wheels begin spinning on the uphill side of a slope. If the uphill mower wheel spins when going across a slope, stop or turn down the slope.

Safety Guidelines for Riding Lawnmowers:

- Wear the required safety work boots
- Never bypass the manufacturer's safety devices
- Make sure the transmission is out of gear before starting the lawnmower
- Never allow others to ride on the lawnmower
- Slow down when turning and when working on steep slopes or rough terrain
- Mow across slopes
- Always look behind the lawnmower before backing-up
- Never leave a running lawnmower unattended
- Completely shut down the lawnmower when getting off the seat
- Always keep the deflection chute pointed away from buildings, vehicles and people

Operators shall always use power lawnmowers according to the manufacturers instructions published in the operator's manual.

Parking Power Lawnmowers

Parking the lawnmower after the job is complete is a critical part of grounds maintenance safety. Attachments that are left in the upright position pose a hazard to hands and feet. Debris and dry grass pose a fire hazard if they touch a hot muffler or other parts.

Safe Parking Practices:

- Lower all raised components
- Stop the engine
- Remove the key when not in use
- Remove all grass and debris after mowing
- Service and clean the mower as needed
- Put mower back in storage and lock the area

Cleaning Power Lawnmowers

The equipment shall be cleaned after each job by removing grass clippings and other debris from the machine, mower deck and deflection chute. Debris left on the equipment is a fire hazard. Be very careful to avoid areas and parts that are hot and pose a burn hazard.

Maintaining Power Lawnmowers

Power lawnmowers shall be maintained according to the manufacturer's guidelines.

CHAIN SAWS

Gasoline Driven Power Saws (Chain Saws)

All chain saws shall be inspected prior to use.

The operator shall conduct a pre-start inspection of the chain saw each day before it is used, checking the following:

- All saw handles and guards are in place and tight
- All saw controls function properly
- The saw chain is properly adjusted and filed
- The muffler is operative
- The chain catcher is in place and undamaged
- The chain brakes and other manufacturer's safety features remain operational

All chain saws shall meet the requirements of the ANSI B175.1-1991 "Safety Requirements for Gasoline-Powered Chain Saws." Each chain saw shall be equipped with a kickback device that minimizes chain saw kickback.

Operators shall follow the manufacturer's instructions for safe operation.

Operators of chainsaws shall wear approved leg protection constructed with cut-resistant material, such as ballistic nylon or Kevlar.

Each gasoline-powered chain saw shall be equipped with a continuous pressure throttle control system, which will stop the chain when pressure on the throttle is released.

The chain saw idle speed shall be adjusted so that the chain will not continue to rotate after the throttle is released.

Chain saws shall **not** be re-fueled within twenty (20) feet of any ignition sources.

Chain saws must be started at least ten (10) feet away from the fueling area.

Operators shall have secure footing when starting a chain saw.

Chain saws shall be started on the ground or otherwise firmly supported. Chain saws weighing less than fifteen (15) lbs. can be dropped started.

A separate line shall support chain saws weighing more than fifteen (15) lbs., unless they are being used from an aerial device.

Chain saws weighing more than fifteen (15) lbs. are permitted outside of the bucket of an aerial lift only after ensuring that the area below the lift is clear of personnel and other equipment.

Chain saws shall only be started and operated when all personnel are clear of the saw.

Chain saws shall not be used to cut directly overhead.

When moving from tree to tree the chain brake shall be set, the fingers shall be removed from the trigger and the bar kept away from the body.

Chain saws shall be shut down or the chain brake shall be engaged whenever the saw is being carried further than 50 feet.

Chain saws shall be shut down or the chain brake shall be engaged when the saw is carried less than 50 feet if hazardous conditions exist.

All cutting shall be done at high engine speed (full throttle) particularly at the start of the cut.

All cleaning, refueling, adjustments and repairs to chain saws can only be conducted when the engine of the power saw is stopped.

Chain saws shall be cleaned according to the manufacturer's instructions and maintenance schedule.

POWER BLOWERS

All power blowers shall be inspected prior to use.

Operators shall follow the manufacturer's instructions for the safe operation of power blowers.

Employees shall wear the proper personal protective equipment when operating power blowers. The required PPE is as follows:

- *Eye Protection:*

Employees using power blowers shall wear approved safety glasses.

- *Hearing Protection:*

Employees operating a power blower shall wear approved hearing protection.

- *Respiratory Protection:*

Employees operating a power blower shall wear a dust mask.

Power blowers shall not be operated without the tubing.

Employees shall walk towards the work and direct the discharge of debris away from people, animals, glass, and solid objects.

Do not use the power blower for spreading or misting chemicals, fertilizers, pesticides or other toxic substances.

Work operations shall be stopped if employees, bystanders or animals enter the area where the power blower is being operated.

The power blower shall not be used from ladders, trees, rooftops or other unstable surfaces.

STRING TRIMMERS

All string trimmers shall be inspected prior to use.

Operators shall follow the manufacturer's instructions for the safe operation of string trimmers.

Employees shall wear the proper personal protective equipment when operating string trimmers. The required PPE is as follows:

- *Eye Protection:*

Employees using string trimmers shall wear approved safety glasses.

- *Hearing Protection:*

Employees operating a string trimmers shall wear approved hearing protection.

The work area shall be clear of all hazards that could be thrown from the ground maintenance equipment. The equipment operator shall be responsible for making sure the work area is free from trash, rocks, wires, broken glass, sticks and other forms of debris that could be thrown by the grounds maintenance equipment.

Work operations shall be stopped if employees, bystanders or animals enter the area where the string trimmer is being operated.

String trimmers shall be kept close to the ground and angled slightly to the left to discharge trimmings away from the operator.

Use only monofilament string recommended by the manufacturer. Wire and metal reinforced string shall never be used in the string trimmer.

Employees shall walk towards the work and direct the discharge of debris away from people, animals, glass, and solid objects.

WORK ZONE SAFETY and TRAFFIC CONTROL

Operators are responsible for ensuring traffic safety anytime the lifts are used on paved surfaces accessible by motor vehicles, bicycles, and foot traffic.

Before going to the work site a traffic control plan should be developed. The control plan addresses the need for traffic control devices and personal protective equipment for the employees working on the site.

Maintenance work that takes place either on or near the roadway creates a potentially hazardous situation, which shall require the use of traffic controls.

All necessary traffic control devices shall be installed before maintenance work begins and must be maintained during the entire work period.

Traffic control devices (signs, barricades, and cones) provide drivers with sufficient advanced warning, provide proper protection for motorists and employees, and advise the motorists of the travel path.

Only the necessary vehicles should park at the site. Those vehicles should be parked in areas that provide safe entrance and exit to and from the site. The vehicles should not create potential conflicts with other vehicles/equipment operating in the work area.

All vehicles/equipment in work area should be parked on the same side of the road.

All employees should work facing traffic. If this not practical then a lookout should be provided. Employees should be alert of the job site hazards and should identify the appropriate escape routes.

All traffic control devices should be removed in a timely manner and in a manner that provides employees the most protection.

Avoid working during peak hours on high volume traffic routes.

Safety Vests

Safety Vests shall be provided for all employees who are responsible for traffic safety and cone placement. The safety vests shall meet the ANSI/ISEA 107-1999 Standard. The standard requires that safety vests be provided to employees working in or close to roadways.

Safety Vests fall into the following Classes:

Class I: Garments for workers who have ample separation from vehicular traffic that does not exceed 25 mph. Class I garments are typically safety vests and are recommended for workers in warehouses with equipment traffic, sidewalk maintenance workers and delivery vehicle drivers.

Class II: Garments intended for users who need greater visibility in poor weather conditions and whose activities occur near roadways where traffic speeds are between 25 mph and 50 mph. This class of garment is suitable for most ground maintenance operations and roadway crews (keeping in mind the speed limit of the adjacent roadway).

Class III: Garments providing the highest level of visibility to workers in high-risk environments that involve high task loads, a wide range of weather conditions and traffic exceeding 50 mph. Class III garments, which provide coverage to the arms and/or legs as well as the torso include pants, jackets, coveralls or rain wear. These garments are recommended for all roadway crews, vehicle operators including mowing operators, utility workers, survey crews, emergency responders, and accident site investigators.

ANSI 107-99 Safety Vest Standards

Requirement	Class III garments	Class II garments	Class I garments
Background material	1240 in ² (0.80 m ²)	775 in ² (0.50 m ²)	217 in ² (0.14 m ²)
Reflective material	310 in ² (0.20 m ²)	201 in ² (0.13 m ²)	155 in ² (0.10 m ²)
Photometric performance	Level 2	Level 2	Level 2
Combined performance	N/A	N/A	310

SECTION 5.12 Hand and Power Tools

The Commission has implemented this Directive for the use of hand and power tools complies with Title 29 Code of Federal Regulations (CFR) §1910 (as applicable), §1926 (as applicable) and applicable manufacturer manuals/recommendations.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the use, care and, maintenance, of hand and power tools. Tools provided by the Commission shall be in good working order and shall be used only for their intended purpose in accordance with manufacturer specifications.

APPLICABILITY

The Directive applies to all Commission employees required to use hand and power tools to perform their assigned work duties.

DEFINITIONS

Authorized Person means a person approved or assigned by the employer to perform a specific duty or duties at the jobsite.

REQUIREMENTS

General

Appropriate personal protective equipment (PPE) shall be used with all tools (see the PPE section of this manual).

Electric power operated tools shall either be of the approved double-insulated type or grounded in accordance with Subpart K of this part.

The use of electric cords for hoisting or lowering tools shall not be permitted

Where practical, suitable devices should be used to hold chisels, stakes, and other implements driven or struck with a hammer, to avoid impacting hands and fingers.

When power operated tools are designed to accommodate guards, they shall be equipped with such guards when in use.

Only authorized persons shall be permitted to repair tools.

Tools shall not be altered from their original design.

Authorized personnel according to established procedures shall decontaminate tools that are contaminated.

Tools shall be used only according to their design. Handles shall be in place and used during the operation.

Tools shall not be left on scaffolds or elevated workspaces.

On-off switches controlling the operation of hand-held powered tools shall conform to the following requirements:

- All hand-held powered platen sanders, grinders with 2-inch or less diameter wheels, routers, planers, laminate trimmers, nibblers, shears, scroll saws, and jigsaws with blade shanks 0.25-inch-wide or less may be equipped with only a positive on-off control
- All hand-held powered drills; tapers; fastener drivers; horizontal, vertical, and angle grinders with wheels exceeding 2 inches in diameter; disk sanders; belt sanders; reciprocating saws; saber saws; and other similar tools shall be equipped with a momentary contact on-off control. They may have a lock-on control provided the turnoff can be accomplished by a single motion of the same finger or fingers that turn it on
- Jackhammers, with exception of concrete vibrators, and similar pneumatic-powered handtools and other hand-held power tools including chainsaws, circular saws, and percussion tools shall be equipped with a constant pressure switch that shuts off power when pressure is released

Only non-sparking tools shall be used in locations where sources of ignition may cause an explosion or fire.

Employees shall not work under areas where hand-held tools are being used unless the tools are equipped with restraining straps or appropriate decking, planking, and netting are provided for employee protection.

When the periphery of the blades of a fan is less than seven (7) feet above the floor or working level, the blades shall be guarded. The guard shall have openings no larger than 1/2 inch.

Machines designed for a fixed location shall be securely anchored to prevent walking or moving.

Loose or frayed clothing or long hair, dangling ties, jewelry, etc. shall not be worn around moving machinery or other sources of entanglement.

INSPECTIONS

Users are responsible for visually inspecting the tools they use each day for visual defects. Defective tools shall be reported to the supervisor and be tagged and taken out of service.

Defective tools shall be stored where they cannot be used until they are repaired. Non-repairable tools shall be / disposed of in accordance with the Commission's policies.

ABRASIVE BLASTING TOOLS

Blast cleaning nozzles shall be equipped with an operating valve, which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.

Abrasive blasting suits shall be inspected at least monthly for leaks, tears, and general conditions.

Users shall inspect blasting suits daily for defects. Defective equipment shall be taken out of service until repairs are completed, or the suit is replaced.

AIR HOSES

All hoses exceeding 0.5-inch inside diameter shall have a safety device at the source of supply or branch line, which will automatically reduce pressure in case of a line failure. All connections, couplings, and splices in air lines exceeding 0.5-inch inside diameter shall be equipped with clips and wire rope or whip checks. The clips and whip checks shall be installed in a manner that prevents whipping of the hose line, should the connection coupling or splice fail.

Air hoses shall not be disconnected at compressors until all air pressure has been bled off the system.

The manufacturer's safe operating pressure for hoses, pipes, valves, and fittings shall not be exceeded for any reason. Defective hoses, valves, and fittings shall be immediately removed from service.

Compressed air shall not be directed at any part of the body, for cleaning purposes, except when reduced to less than 30 lb/in², and then only with effective chip guarding and the operator protected by applicable personal protective equipment.

Air hoses shall not be used for hoisting or lowering tools. Hoses shall not be laid on ladders, steps, scaffolds, or walkways in a manner creating a tripping hazard and shall not be exposed to damage from vehicle or other traffic.

DRILL PRESS

Pieces of material being drilled shall be held tightly in a vise or clamp.

Before drilling, the employee shall check the spindle speed and the setup.

Before drilling, the chuck key shall be removed. Never leave the chuck key in the chuck.

ELECTRIC POWERED TOOLS (general)

Electric powered tools shall be double-insulated type and/or effectively grounded as required for ground fault protection or other grounding and bonding requirements.

Power cords shall not be used for hoisting or lowering tools. Power cords shall not be laid on ladders, steps, scaffolds, or walkways in a manner creating a tripping hazard. Electric power cords shall not be exposed to damage from vehicle or other traffic.

When automatic restarting would create a hazard, electrically driven equipment shall be controlled with a device that will prevent automatic restarting following a power failure.

FUEL POWERED TOOLS (general)

All fuel-powered tools shall be stopped while being refueled, serviced, or maintained, and fuel shall be transported, handled, and stored as appropriate for hazardous materials.

When fuel powered tools are used in enclosed spaces, the applicable requirements for concentrations of toxic gases and use of personal protective equipment shall apply.

Gasoline powered tools shall not be used underground or in locations where toxic exhaust gases can accumulate.

GRINDERS

The maximum angular exposure of the grinding wheel periphery and sides for safety guards used on cylindrical grinding machines shall not exceed 180°. This exposure will begin at a point not more than 65° above the horizontal plane of the wheel spindle.

All abrasive wheels shall be closely inspected and ring-tested before mounting to ensure that they are free from cracks or other defects. Cracked or defective abrasive wheels shall be removed from service immediately.

Grinding wheels shall be carefully installed and not forced. Whenever possible, when grinding with a portable grinder, position the grinding wheel so that the sparks and steel go away from the person doing the work.

Nonferrous metal should never be ground because of the danger of exploding grinding wheels, unless the grinding wheel is specifically designed to grind these metals.

Sheet metal and other small pieces of work shall never be ground on a pedestal grinder.

Grinding shall never be done against the side of the wheel.

Grinding wheels shall not be used if the pores are clogged. The wheels shall also be free of large chips and grooves.

GRINDERS (bench and floor stand)

The angular exposure of the grinding wheel periphery and sides for safety guards used on machines known as bench and floor stands should not exceed 90° or one-fourth of the periphery. This exposure will begin at a point not more than 65° above the horizontal plane of the wheel spindle. Whenever the nature of the work requires contact with the wheel below the horizontal plane of the spindle, the exposure shall not exceed 125°.

Floor and bench-mounted grinders shall be provided with readily adjustable work rests, which are rigidly supported. The tool rest shall always be set within 1/8 inch away from the wheel. The nose guard shall be adjusted to within 1/4 inch of the wheel.

Grinding tools shall not be used without the safety guards.

All abrasive wheel bench and stand grinders shall be provided with safety guards that cover the spindle ends, nut, and flange projects and are strong enough to withstand the effects of a bursting wheel.

Safety guards where the operator stands in front of the opening shall be constructed so that the peripheral protecting member can be adjusted to the constantly decreasing diameter of the wheel. The maximum angular exposure above the horizontal plane of the wheel spindle as specified below shall never be exceeded, and the distance between the wheel periphery and the adjustable tongue or the end of the peripheral member at the top shall never exceed 1/4 inch.

HAND TOOLS (general)

Sharp tools such as chisels, screwdrivers, knives, and pointed objects shall not be carried in pockets. Sharp tools carried by hand shall have the sharp or pointed end facing away from the body.

Lengths of pipe shall not be used as an extension of a tool to increase torque. For example, a length of pipe inserted over the handle of a pipe wrench.

Persons shall not hammer on spanner wrenches unless they are designed for that purpose.

The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool. Impact tools, such as drift pins, wedges, and chisels, shall be kept free of mushroomed heads.

Screwdrivers shall not be used as chisels.

Wrenches, including adjustable pipe, end, and socket wrenches, shall not be used when jaws are sprung to the point that slippage occurs.

Files shall be equipped with handles and not be used to punch or pry.

HYDRAULIC-POWERED TOOLS (general)

The manufacturer's safe operating pressure for hoses, valves, pipes, filters, and fittings shall not be exceeded.

The fluid used in hydraulic powered tools shall be an approved fire-resistant fluid and checked on a regular basis.

Stationary presses shall be provided with guards that adequately contain flying particles forcibly expelled from the material being compressed.

JACKS (ratchet, screw, and hydraulic)

The manufacturer's rated capacity shall be legibly marked on all jacks and shall not be exceeded.

Jacks of any type shall have a positive stop to prevent over travel.

Jacks shall be set on a stable and firm footing and cribbed or blocked where necessary to prevent settlement or dislodgment. Where there is a possibility of slippage of the metal cap of the jack, a wood block shall be placed between the cap and the load. After the load has been raised, it shall be cribbed, blocked, or otherwise secured at once.

Persons shall not work under vehicles supported by bumper jacks or chain hoists without protective blocking that will prevent injury if jacks or hoists should fail.

All jacks shall be properly lubricated at regular intervals.

Each jack shall be thoroughly inspected at times that depend upon the service conditions.

Inspections shall be not less frequent than the following:

- For constant or intermittent use at one locality, once every 6 months
- For jacks sent out of shop for special work, when sent out, and when returned
- For a jack subjected to abnormal load or shock, immediately before and immediately thereafter
- Repair or replacement parts shall be examined for possible defects
- Jacks which are out of order shall be tagged accordingly and shall not be used until repairs are made

Hydraulic jacks exposed to freezing temperatures shall be supplied with adequate antifreeze liquid.

NAIL GUNS (pneumatic)

Shall be provided with an automatically closing valve actuated by a trigger located inside the handle where it is reasonably safe from accidental operation.

The machine shall operate only when the trigger is depressed.

Do not pull trigger or depress contact arm while connected to air supply.

When in operation always the contact arm shall be pointed downward away from the personnel.

The air supply shall be disconnected when reloading or servicing of a nailing gun.

Electric- pneumatically driven nailers, staplers, and similar equipment provided with automatic fastener feed, which operate at more than 100 lb²/in, shall have a safety device on the muzzle to prevent the ejection of the fasteners unless the muzzle is in contact with the work surface.

PNEUMATIC TOOLS (general)

The pneumatic impact tools shall have the following features:

- An automatically closing valve activated by a trigger located inside the handle where it is reasonably safe from accidental operation. The machine shall operate only when the trigger is depressed
- A retaining device that holds the tool in place so that it cannot fly off accidentally from the barrel
- Be provided with heavy rubber grips to reduce operator vibration and fatigue

Pneumatic power tools shall be secured to the hose in a positive manner to prevent accidental disconnection.

POWDER-ACTUATED TOOLS

Powder-actuated tools shall be operated and serviced only by persons who have been trained and certified by the manufacturer in the use of such tools. Operators shall possess an operator's card, at all times while using this tool, issued by a firm or person authorized to issue such cards.

Operators of powder-operated tools shall wear safety goggles and face shields and utilize hearing protection when the tool is in use. Other employees working in close proximity to this activity shall also utilize hearing protection.

Powder-actuated tools shall not be used in explosive or flammable atmospheres.

Only powder charges, studs, or fasteners specified by the manufacturer for the specified tool shall be used.

Tools shall be designed to operate only when pressed against the work surface with a force at least 5 pounds greater than the weight of the tool. They shall be constructed so the tool cannot fire when dropped or during loading or preparation to fire. All tools shall be used with the correct shield, guard, or attachment recommended by the manufacturer.

Driving into soft or easily penetrated material is prohibited unless the material is backed to prevent the pin or fastener from passing completely through and creating a flying missile hazard on the other side. Tools shall not be used on very hard or brittle materials including, but not limited to, cast iron, glazed tile, surface hardened steel, glass block, rock, face brick, or hollow tile. No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.

Tools shall not be loaded until just prior to firing. Loaded tools shall not be left unattended. Neither loaded nor empty tools shall be pointed at any person, and all parts of the body shall be kept clear of the muzzle.

Tools shall be tested each day before loading to ensure that the safety devices are in proper working order; the test shall be conducted in accordance with the manufacturer's recommended test procedures.

High-velocity tools shall be used only for those applications where low-velocity tools will not meet the job requirements.

Work sites where powder actuated tools are used shall maintain a list of all powder-actuated tools and names of certified operators. This list shall be made available at the control point of where tools are issued or controlled and distributed to supervisory personnel as appropriate.

Signs warning of the use of powder-actuated tools shall be posted appropriately.

SAWS (bench and radial-arm)

Bench-type circular saws shall be equipped with spreaders, anti-kickback devices, and guards that automatically enclose the exposed cutting edges.

For saws over 20 inches in diameter or operating speeds over 10,000 peripheral feet per minute only blades designed for use at the marked operating speed shall be used. When the saw is retensioned for a different speed, the marking shall be changed to indicate the new speed.

Radial arm saws and swing cutoff saws shall be equipped with:

- Limit stops, which prevent the leading edge of the blade from traveling beyond the edge of the table
- Hoods and/or guards that protect the operator from flying material, direct the sawdust toward the back of the blade, and enclose all parts of the blade not in contact with the material being cut

- Automatic brakes or automatic return devices

Power saws shall not be left running and unattended.

Push sticks or other devices shall be used to guide materials through the cutting plane of circular saws.

The hand, arm or any other part of the body shall not pass over the saw blade while it is in operation.

Bench-type circular saws and radial saws shall be equipped with enclosed-type sawdust collectors.

Cracked, bent, or otherwise defective blades shall be removed from service.

The blade of a tablesaw shall not be set higher than (1/16") one sixteenth of an inch above the material being cut.

SAWS (portable electric)

Portable circular saws shall have the following features:

- Guards above and below the base plate
- The upper guard shall cover the saw to the depth of the teeth
- The lower guard shall cover the saw to the depth of the teeth
- When the tool is withdrawn from the work the lower guard shall automatically and instantly return to the covered position
- Be equipped with a constant pressure switch or control that shuts off the power when pressure is released
- May have a lock-on control provided that the saw can be turned off with a single motion of the finger that turned on the saw
- Operating controls shall be located as to minimize the possibility of accidental operation that would constitute a hazard to employee's safety
- The hand, foot, knee, leg or any other part of the body shall not be used as a support for materials

SPRAY GUNS (airless)

Airless spray guns of the type which atomize paints and fluids at pressures of 1,000 lb/2in or more shall be equipped with automatic or visible manual safety devices, which will prevent pulling of the trigger and prevent release of the paint or fluid until the safety device is manually released.

In lieu of the above, a diffuser nut to prevent high-pressure release when the nozzle tip is removed and a nozzle tip guard to prevent the tip from contacting the operator or other equivalent protection shall be provided.

WASHING and STEAM UNITS (high pressure)

Employees who use high pressure washing tools and steam cleaning systems shall follow the manufacturer operating instructions and wear all the required protective equipment.

As a minimum, operating personnel are required to wear protective footwear, facial protection, and hand protection as determined by the operating process, operating design, and manufacturer specifications.

Employees who operate high pressure washing units or steam systems shall be trained and qualified by a competent person.

WINCHES and HOISTS (hand-powered)

Hand-powered winches and hoists shall be used within the manufacturers rated capacity, and the capacity shall be legibly marked on the winch or hoist.

The use of hand cranks is prohibited unless the winch or hoist is equipped with positive self-locking dogs or if the wormgear type hand wheels do not have projecting spokes or knobs.

WOODWORKING TOOLS (general)

Disconnect switches: All fixed power-driven woodworking tools shall be provided with a disconnect switch that can either be locked or tagged in the off position.

Switches shall be located to enable the operator to cut off the power without leaving his operating position.

Whenever the nature of the work will permit, automatic feeding devices shall be installed on fixed power-driven woodworking tools. Feeder attachments shall have the feed rolls and/or other moving parts guarded to protect the operator.

When automatic restarting would create a hazard, electrically driven equipment shall be controlled with a device that will prevent automatic restarting following a power failure. A push stick, block, or similar safe means shall be used for all operations close to high-speed cutting edges.

Planers and joiners shall be equipped with cylindrical cutting heads and fully guarded.

Band saw blades shall be fully enclosed except at the point of contact with the work.

All personal protective equipment provided for use shall conform to CFR 1910 Subpart I /CFR 1926 Subpart E.

Other requirements. All woodworking tools and machinery shall meet other applicable requirements of American National Standards Institute, 01.1-1961, Safety Code for Woodworking Machinery.

SECTION 5.13 Hazard Communication

The Commission has implemented this Directive to ensure employees will be protected from the adverse effects of hazardous and potentially hazardous chemicals. This program complies with Title 29 Code of Federal Regulations (CFR) §1910.1200, Hazard Communication (Hazcom); which has been updated to align with the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS),

PURPOSE

The purpose of this Directive is to ensure that every Commission employee potentially exposed to chemical hazards is informed of the hazards and the appropriate control methods.

APPLICABILITY

This directive applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use, during non-routine tasks or in a foreseeable emergency.

DEFINITIONS

Acute health hazard means a hazard that usually occurs rapidly following a brief exposure, such as a skin rash or eye irritation.

Chemical means any substance, or mixture of substances.

Chemical manufacturer means an employer with a workplace where chemicals are produced for use or distribution.

Chemical name means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

Chronic health hazard means a hazard that is continuous and follows repeated long-term exposure, such as lung cancer or kidney disease.

Classification means to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Common name means any designation or identification such as a code name, code number, trade name, and brand name or generic name used to identify a chemical by other than its chemical name.

Container means a bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.

Employee means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

Employer means a person engaged in a business where chemicals are used, distributed, or produced for use or distribution.

Exposure or exposed means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard.

Foreseeable emergency means any potential occurrence that could result in an uncontrollable release of a hazardous chemical in the workplace.

Hazard category means the division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard class means the nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard not otherwise classified (HNOC) means an adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

Hazard statement means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Hazardous chemical means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Health hazard means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200 -- Health Hazard Criteria.

Label means an appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements means the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Physical Hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas

under pressure; or in contact with water emits flammable gas. See Appendix B to §1910.1200 -- Physical Hazard Criteria.

Pictogram means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Product identifier means the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Safety data sheet (SDS) means written or printed material concerning a hazardous chemical that is prepared in accordance with paragraph (g) of this section.

Signal word means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

Simple asphyxiant means a substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Substance means chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Responsible party means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Use means to package, handle, react, emit, extract, generate a byproduct, or transfer.

Work area means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace means an establishment, job site, or project, at one geographical location containing one or more work areas.

RESPONSIBILITIES

Risk Management and Safety Office

- Has the overall responsibility for developing, implementing and monitoring the Hazard Communication Directive.
- Conduct employee hazard communication training.
- Maintain original employee training records.

- Conduct periodic inspections of chemical storage areas located at M-NCPPC facilities.
- Conduct periodic audits of facilities chemical information lists and safety data sheet binders.
- Conduct an annual review of the Hazard Communication standard as published by the Occupational Safety and Health Administration and make any revisions as necessary.

Departments

- Ensure compliance with Hazard Communication Directive within their department.
- Make the SDS's available for chemicals listed on the Chemical Inventory List to all employees.
- Ensure the chemical inventory list is current and updated for their location.
- Ensure the chemical inventory list is sent to the Risk Management and Safety Office as required.
- Ensure the SDS binder is current and updated for their location.
- Ensure labeling is accurate for all designated chemicals used or stored in the workplace.
- Train their employees in the general requirements of the Hazard Communication Standard, any operations in their department where hazardous substances are used, the location and availability of the SDS's and chemical inventory list.
- Train employees about the potential hazards from chemicals used in the workplace including the nature of the hazards, protective measures and appropriate work practices.
- Forward training records to the Risk Management and Safety Office.

Employees

- Attend training session(s) provided by their supervisor and/or the Risk Management and Safety Office.
- Apply safe practices and procedures when working with and around hazardous chemicals
- Comply with the requirements of the Hazard Communication policy.

REQUIREMENTS

Written Program

This Directive is to provide Commission employees with the necessary information to assist them in protecting their health and wellbeing, from exposure to harmful chemicals.

This Directive applies to all chemicals or chemical products that are known to be present in the workplace to which employees may be exposed during the course of work, and/or in a foreseeable emergency.

The following items are excluded from this Directive and the requirement to include on the chemical inventory list, as well as in training sessions:

- Any hazardous waste defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976.
- Tobacco or tobacco products.
- Wood or wood products.
- Food, drug, cosmetics or alcoholic beverages packaged for sale to consumers or intended for personal consumption by employees in the workplace.
- Any consumer product or hazardous substance as those defined in the Consumer Product Safety Act and Federal Hazardous Substance Act where the product is used in the workplace in the same manner as normal consumer use, and which use results in a duration and frequency of exposure which is not greater than consumer exposure.
- Any drug as defined by the Federal Food, Drug and Cosmetic Act that is used in its final form for administration to the patient.

CHEMICAL INVENTORY LIST (CIL)

Each M-NCPPC workplace shall compile an inventory of hazardous chemicals and submit a copy of the chemical inventory list to the Risk Management and Safety Office. The master copy of the chemical inventory list (CIL) shall be kept with the location's safety data sheets (SDS).

Each time a department receives a new chemical, that chemical must be added to the department's CIL within thirty (30) days. A copy of the new CIL shall be sent to the Risk Management and Safety Office.

The CIL shall be updated by each facility on an annual basis and a copy of the updated list shall be forwarded to the Risk Management and Safety Office prior to January 31st for each calendar year.

The Risk Management and Safety Office shall maintain CILs for a period of at least thirty (30) years.

The CIL shall include the following information:

- Business Address
- Facility Name and Address
- Contact Person
- Title
- Telephone Number
- Date of Preparation or Revision
- Common Name of the Chemical
- Chemical Name
- Work Area(s) where the Chemical is Used
- Date Added to List
- Emergency Telephone Number
- Quantity on Hand
- SDS on File

SAFETY DATA SHEETS (SDS)

Safety Data Sheets provide information on how to use the chemicals safely and on how to handle chemical accidents. The SDS include information such as product name, chemical abstract service number(s) (CAS), ingredients, physical data, fire and explosion hazard data, environmental and disposal information, health hazard data, first-aid instructions and handling precautions.

The employer shall maintain in the workplace copies of the required safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

Where employees must travel between workplaces during a work shift, i.e., their work is carried out at more than one geographical location, the safety data sheets may be kept at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

The SDS shall be placed in a binder and be located in an area that is convenient and accessible to all employees. The most current SDS available shall be obtained for each chemical and filed alphabetically by common name or trade name. They can also be filed by category or group of chemicals. The SDS binder and Chemical Inventory List (CIL) shall be updated as chemicals are either added to or removed from stock.

A copy of the SDS shall be provided to all field supervisors for use in the field when employees are using chemicals. This is to ensure that the SDS's are readily available to employees in the field in case of an emergency.

Employees who request information about workplace chemicals shall be granted access to that information immediately. If immediate access is not feasible, then all attempts shall be made to provide the requested information during the course of the work shift.

SDS's must be made readily available upon request, to designated employee representatives and to the Assistant Secretary of Labor.

Alternate sources for Safety Data Sheets (SDS)

Manufacturers and importers of chemicals or chemical products are responsible for preparing and providing Safety Data Sheets to distributors and retailers. Chemical distributors and retailers are to provide the employer with a copy of the SDS for each chemical purchased/supplied. If the employer does not receive the required SDS from the vendor, they should contact the manufacturer to obtain a current copy of the SDS. Contact can be made via the manufacturer's website or via telephone.

Hazard Determination

Facility Managers shall identify each chemical at their facility that has the potential to pose a physical or health hazard. This should be done annually, by conducting a chemical inventory and updating the Chemical Inventory List (CIL)

TRAINING

The Commission will provide employees with information and training on hazardous chemicals that are located in their work area at the time of their initial assignment and whenever a new chemical is introduced into the work area.

Employee training shall include:

- The requirements of the hazard communication standard
- Any operation in their work area where hazardous chemicals are present
- The details, location and availability of the written Hazard Communication Program, and the site-specific SDS binder.

Specific elements of the training program also include:

- How the employee can detect the presence of a hazardous chemical in the workplace
- Specific hazards of the chemicals in the workplace
- Information to understand labels as well as interpret the SDS
- Measures employees can take to protect themselves from potential chemical hazards in their work area
- Procedures implemented to provide employees information about chemical hazards for non-routine or special tasks

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Availability and Use

Supervisors shall make personal protective equipment (PPE) including gloves, safety glasses, face shields, aprons, and other PPE available to employees, prior to them performing work with and/or around hazardous chemicals.

Proper use of PPE is essential to prevent exposure to physical and health hazards of chemicals. Employees shall receive instruction on the proper selection, use and care of PPE. All PPE shall be maintained in good condition and be inspected prior to use.

Labels and other forms of warning

Labels are required on all containers used for storage of chemicals. Labels must provide appropriate warnings of the hazard associated with the chemical, along with other general information.

Labels and other forms of warnings shall be printed in English, legible and prominently displayed on the container.

Labels on shipped containers:

The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked. (Hazards not otherwise classified do not have to be addressed on the container).

Where the chemical manufacturer or importer is required to label, tag or mark the following information shall be provided:

Product identifier;

Signal word;

Hazard statement(s);

Pictogram(s);

Precautionary statement(s); and,

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

The chemical manufacturer, importer, or distributor shall ensure that the information provided is in accordance with OSHA'S hazard communication labeling requirements. for each hazard class and associated hazard category for the hazardous chemical, prominently displayed, and in English (other languages may also be included if appropriate).

The chemical manufacturer, importer, or distributor shall ensure that the information is located together on the label, tag, or mark.

Labels shall remain intact on all chemical containers. If the label is illegible or defaced, it shall be replaced.

Replacement labels shall include the common name of the chemical, the appropriate hazard warnings (health, flammability, reactivity and personal protective equipment, etc.).

Labels – Primary Containers

A primary container is one in which the chemical is received from a supplier or vendor. Primary containers of chemicals that may require re-labeling shall be re-labeled with, at minimum, the name appearing on the SDS, the pertinent physical and health hazards, the organs that would be affected and the manufacturer's name and address.

Labels – Secondary Containers

A secondary container is one in which the chemical is transferred after receipt from the supplier or vendor. Secondary containers shall be labeled with at least the name of the chemical appearing on the SDS.

All portable containers with chemicals transferred from a labeled container shall be labeled or marked to clearly identify its contents.

RECORDKEEPING

The Risk Management and Safety Office shall:

- Maintain the Chemical Inventory List for each facility
- Maintain employee Hazard Communication training records

Each Department shall:

- Ensure that each of its facilities compile and maintain an updated Chemical Inventory List (CIL)
- Submit all Chemical Inventory Lists (CIL) to the Risk Management and Safety Office
- Maintain an SDS binder
- Maintain copies of the employee Hazard Communication training records

General Questions

1. What must be done if the SDS for a product in the work area is not currently available to the employees using the material?
 - Contact your supervisor as to the location of the SDS at the work site. If the SDS is not available, continue with the next step.
 - Contact the manufacturer of the product. The best way is to conduct an Internet search on the product name and obtain the SDS via the manufacturer's website. If the SDS is not available via the Internet, then continue to the next step.
 - Write a letter of request or call the manufacturer or distributor of the product.
 - i. State that you require a copy of the SDS
 - ii. Provide the exact name of the product and include the product identification number.
2. What should be done with the SDS when it is received?
 - The supervisor should receive the copy of the SDS and update the department records by placing the SDS in the department SDS binder.
 - The supervisor shall update the department's Chemical Inventory List.
 - Potentially affected employees should be advised of the hazards of the chemical and the protective methods to be used.
3. What must be done if the manufacturer fails to provide an SDS?
 - Keep a copy of the request letter on file or a record of the phone call. Attach any response from the manufacturer to the first letter.
 - Inform the Risk Management and Safety Office of the manufacturer's failure to provide the SDS.

Please refer to Title 29 Code of Federal Regulations (CFR) §1910.1200, for additional Hazcom details.

SECTION 5.14 Hearing Conservation

The Commission has implemented this Directive to employees for hazards associated with noise and complies with Title 29 Code of Federal Regulations (CFR) §1910.95, Occupational Noise Exposure.

PURPOSE

The purpose of this Directive is to protect employees from occupational exposure to noise that cannot be diminished or eliminated through engineering or administrative controls.

APPLICABILITY

The Directive applies to all Commission employees who have been identified as having a predetermined risk of occupational exposure to regulated noise levels shall be provided with the appropriate procedural precautions and training.

APPLICATION

The primary tools of the Hearing Conservation Directive (HCD) include:

- Noise hazard evaluation
- Engineering and Administrative Controls
- Annual Audiometric Testing
- Hearing Protection Training
- Hearing Protection Equipment
- Recordkeeping

DEFINITIONS

Action Level means the noise level (85 dBA), calculated as an eight-hour, time weighted average, at which OSHA *requires* exposed employees be included in the Hearing Conservation Program.

ANSI means the American National Standards Institute.

Attenuation is the reduction in sound pressure level in dB, which occurs as a person moves further and further away from a noise source (e.g., moving out doors).

Audiogram refers to the chart, graph, or table showing hearing threshold levels as a function of frequency; a method of measuring the degree of hearing loss.

Baseline Audiogram refers to the audiogram against which future audiograms are compared.

Decibel (dB) is a unit of measurement of sound levels.

Dosimeter is a special battery-powered sound level meter that is worn by the worker being monitored for noise exposure. It continuously computes TWA and noise dose using a specified exchange rate for trading sound level and exposure duration. The rate for OSHA is 5 dB.

Hearing Loss is defined as the loss of sensitivity of the auditory system, measured in dB below the standard level. Some hearing loss is age-related; some is related to exposure to high levels of noise.

Hearing Protector Devices (HPD) refers to the devices provided to employees to protect their hearing in areas where the noise exposure TWA is 85 plus dB.

Hertz (Hz) is the unit of measurement of frequency, numerically equal to cycles per second.

Noise Dosimeter is an instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

Noise Reduction Rating (NRR) is the HPD manufacturer's single number attenuation rating based on idealistic laboratory measurements across a range of frequencies.

Permissible Exposure Limit (PEL) is the eight-hour, time-weighted average noise level that must not be exceeded. The OSHA PEL is 90 dBA per 8-hour day with a 5 dB exchange rate.

Projected Dose: Projects an 8-hour dose from the sample obtained in less than 8 hours.

Sound Level Meter is the basic instrument used to measure sound pressure variations in the air.

Time-Weighted Average (TWA): The sound level, which, if constant over an eight-hour exposure, would result in the same noise dose as is measured, and increases per halving the time.

RESPONSIBILITIES

The Risk Management and Safety Office shall be responsible for coordinating this Directive. This includes the following specific responsibilities:

- Prioritizing evaluations of work areas based on noise exposure
- Performing noise measurements
- Educating supervisors and employees about the effects of noise
- Consulting and advising on engineering and administrative controls to reduce noise exposure
- Recommending proper hearing protection devices
- Training employees and supervisors on the need for, proper use and care of hearing protection devices

Supervisors

The supervisors in areas covered by the HCD are responsible for:

- Implementing engineering and/or administrative controls to reduce noise exposure
- Notifying the Risk Management and Safety Office of changes in workplace processes or equipment which effect noise levels
- Notifying the Risk Management and Safety Office of employee new hires, rehires, transfers, or terminations
- Ensuring that proper hearing protection is provided
- Enforcing the use of required hearing protection
- Assuring employees attend required HCD training

Employee

Employees enrolled in the HCD are responsible for:

- Following safe work practices that reduce or prevent occupational noise exposures
- Attending HCD required training
- Participating in the audiometric testing under the program guidelines
- Wearing properly fitted hearing protection when necessary

NOISE MEASUREMENTS

Anticipation and Recognition

A systematic approach is used to evaluate workplace noise levels. The first step is to anticipate noise levels that will be generated while using certain pieces of equipment, such as chain saws, masonry drills, tractors, and lawn mowers. Employees who operate that equipment can have potentially high noise exposure.

Supervisors shall notify the Risk Management and Safety Office of any equipment or processes that raise noise levels to questionable levels. The Risk Management and Safety Office will then conduct a noise survey.

WORKPLACE MONITORING

Noise Surveys

A Sound Level Meter (SLM) or noise dosimeter will be used to conduct all necessary noise monitoring. Work areas in which the noise seriously hampers speech communications at close distances shall have the noise levels assessed. Noise monitoring or measuring shall be conducted only when noise level exposure are at or above 85 dB.

Noise measurements using a Sound Level Meter or a noise dosimeter, which meet the American National Standards Institute (ANSI) specifications, will be used to monitor the workplace noise exposure.

NOISE MEASURING INSTRUMENTS

Equipment for noise measurements includes sound level meters, noise dosimeters and the associated equipment for calibrating these instruments. These types of meters are generally considered for area noise monitoring.

Sound Level Meters

A sound level meter is a device that measures the intensity of sound at a given moment at one point in time. It is generally necessary to take a number of measurements at different times and at different locations in the work places.

Noise Dosimeters

This noise-measuring instrument is similar to a sound level meter, however it stores sound level measurements and integrates those readings to provide an average noise exposure reading for a given period of time (e.g. an 8-hour workday).

The noise dosimeter is worn by the employee and provides an accurate measurement of noise exposure for the locations where the employee works.

ENGINEERING and ADMINISTRATIVE CONTROLS

Engineering Controls

The preferred method of controlling excessive exposure to noise sources is by the use of engineering controls. The Risk Management and Safety Office shall conduct noise surveys of areas identified as having excessive noise and make recommendations for the engineering controls to be used to control the exposure.

The OSHA Occupational Noise Exposure Standard §1910.95 requires that employees be protected against effects of noise exposure when sound levels exceed the levels in Table – 1.

Time per day (hours)	Sound level (dBA)
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

Permissible Noise Exposures Table – 1

If the values in the above table are exceeded, feasible administrative (e.g., worker-machine rotation, breaks from noise) or engineering (e.g., quieter machinery, noise path absorbers or barriers, mufflers, isolation) controls shall be utilized. If such controls fail to reduce sound levels to within the levels of the above table, personal protective equipment (e.g., ear plugs, earmuffs) shall be provided and used to reduce sound levels to within the levels of the table, which will cause noise levels to > 90 dBA TWA.

Excessive noise exposures may be reduced by controlling the noise emitted at the source, along the path, or at the receiver (employee). The method chosen is dependent upon the particular problem to be solved and is limited by such factors as feasibility, relative effectiveness, and impact upon employees and their productivity.

Administrative Controls

Administrative controls include a very broad and practical range of noise reduction solutions. The most common administrative noise control is the modification of work schedules to limit employee noise exposure. This cannot only reduce noise exposures, but can sometimes increase productivity by dividing a task between two or more employees. Caution must be taken to prevent an increase in the percentage of the workforce being exposed to noise hazards. A regularly scheduled equipment maintenance program and the establishment of set noise control limits for new or modified equipment are also effective administrative means of controlling noise, and will be highly recommended to affected work areas and supervisors.

It is the policy of OSHA to enforce the use of engineering and administrative noise controls whenever feasible, particularly in areas where hearing protection devices are not adequate. The Risk Management and Safety Office will provide recommendations on engineering or administrative controls, but the implementation of these controls is the responsibility of individual departments.

AUDIOMETRIC TESTING

As required by the OSHA Occupational Noise Exposure Standard §1910.95, the Risk Management and Safety Office has developed this Directive that provides annual audiometric testing at no cost to employees who are known to work in areas with high-level noise exposures (TWAs of 85dBA or greater). A contract occupational health group will provide the audiometric testing by a certified Audiologist.

Baseline Audiograms

This is the audiogram against which future audiograms are compared. Baseline audiograms shall be provided within six (6) months of an employee's first exposure at or above the action level. The base line audiogram testing shall be preceded by at least fourteen (14) hours without exposure to workplace noise. The employee's supervisor shall provide hearing protectors as a substitute for the requirement that baseline audiograms be preceded by fourteen (14) hours without exposure to workplace noise.

The baseline audiogram is a pure tone, air conduction, hearing threshold test on 500, 1000, 2000, 3000, 4000, and 6000 Hertz (Hz). The tests at each frequency are taken separately for each ear.

Annual Audiograms

Employees enrolled in the Hearing Conservation Directive (HCD) shall have an annual audiogram after receiving their baseline audiogram. The annual audiogram is a pure tone, air conduction, hearing threshold test on 500, 1000, 2000, 3000, 4000, and 6000 Hertz (Hz). The tests at each frequency are taken separately for each ear.

Audiogram Evaluation

Each employee's annual audiogram is compared to that employee's baseline audiogram to determine if the audiogram is valid and if the standard threshold shift has occurred.

Follow-up

The results of the audiometric testing will be used to determine if and what type of hearing protection is needed, and if already in use, what further steps must be taken to control an excessive noise exposure problem.

If the annual audiogram shows that an employee has suffered a standard threshold shift (STS), then the employee is retested. If the STS is confirmed, then the audiologist determines if a referral for a clinical audiological or otological (ear) examination is recommended. Each employee shall be notified in writing within twenty-one (21) days of this determination.

Unless a physician determines that the STS is not work related or aggravated by occupational noise exposure, then the following steps are taken:

1. Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.
2. Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
3. The employee shall be referred for clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary, or if it is suspected that the medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

4. The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

HEARING PROTECTIVE DEVICES (HPD)

Availability and Provision

Engineering and administrative controls are the most effective and preferred method to prevent noise-induced hearing loss. In many cases prevention methods also include the use of HPD.

HPD shall be provided to all employees who have or have the potential to be exposed to noise levels at or above the action level. Individual departments shall provide the necessary hearing protection to employees as conditions of employment. Supervisors shall enforce the wearing of hearing protection, when it is required under OSHA Occupational Noise Exposure Standard §1910.95.

A variety of types of hearing protection are available to Commission employees, as required by the OSHA Occupational Noise Exposure Standard §1910.95. The employee's department shall pay for and continue to provide any required HPD to the employee at no cost. Employees are responsible to wear the required HPD and their supervisors are responsible to consistently enforce HPD use.

Types

The two most commonly used types of hearing protection are earplugs and earmuffs. An earplug is inserted into the ear canal to reduce the amount of noise that reaches the ear via that route. An earmuff is worn over the ear to reduce the amount of noise the employee receives via the ear canal.

To prevent noise-induced hearing loss, HPD must reduce noise exposure to time-weighted average levels of 90 dBA or below, or to 85 dBA or below for those workers who have suffered a standard threshold shift. The following is suggested for HPD usage based on noise exposures and the ability of properly selected and worn HPs alone to reduce noise exposures to safe levels. For higher noise levels, it is necessary to use a combination of engineering, administrative and HPD controls.

TWA, dBA	Workers included In HCP?	HPD Usage	HPD Selection Options
<85	No	Voluntary	Free Choice
85-89	Yes	Optional	Free Choice
90-94	Yes	Required	Free Choice
95-99	Yes	Required	Limited Choice
>100	Yes	Required	Very Limited Choice

NOISE REDUCTION RATINGS (NRR)

Hearing Protection (HP) is designed to reduce noise exposure by a certain amount. This maximum noise reduction value is based on idealistic laboratory conditions and is known as the Noise Reduction Rating (NRR). The NRR is subtracted from the measured noise exposure level to indicate the maximum noise exposure reduction the hearing protection can provide the employee.

TRAINING

Participation

The OSHA Occupational Noise Exposure Standard §1910.95 requires all employees with an occupational noise exposure of 85 dBA at an 8-hour TWA or higher attend the Hearing Conservation training.

Scheduling

The HC training is an annual training program conducted by the Risk Management and Safety Office.

Training Topics:

The training will include the following:

- Review of the OSHA Occupational Noise Exposure Standard §1910.95
- The effects of excessive noise levels on hearing
- The purpose of hearing protection
- The advantages and disadvantages and attenuation of the various types of hearing protection
- Instructions on the selection, fitting, use and care of HPD's
- The purpose of the audiometric testing and an explanation of the test procedures

RECORDKEEPING

The Health and Benefits Office will maintain a record of all employee measurements. Detailed audiometric records shall be kept to determine whether an employee has incurred a significant threshold shift, or whether thresholds are descending gradually over time.

Evaluations of engineering or administrative controls implemented to correct or reduce noise exposure problems shall also be documented.

Present and former employees, or representatives of the employee, shall be provided their audiometric and monitoring records upon written request.

The following information shall be recorded for the HCD, both as a requirement of OSHA and as a means of monitoring and evaluating the effectiveness of the *Hearing Conservation Directive*:

Noise Exposure Measurement Records:

Detailed sound survey/dosimeter data, including:

1. Employee name, department, and location of survey
2. Date and time of monitoring
3. Equipment used (including calibrator)
4. TWA and dose
5. List of employees with TWAs ≥ 85 dBA

6. List of departments/work areas with TWAs ≥ 85 dBA

Documentation of Engineering/Administrative Noise Controls

1. Results of engineering sound surveys
2. Installations of noise controls completed and evaluation
3. Regular maintenance performed on equipment

Audiometric Testing Records

Employee audiogram records shall be retained for duration of employment for OSHA and indefinitely for Workers' Compensation.

1. Name, age, department, job classification, TWA exposure
2. Date of audiogram
3. Name of the audiometric examiner
4. Audiometer make, model, serial number, and date of last calibration

History

1. Annual history updates
2. Annual otoscopic inspections
3. Pre-employment or per-exposure audiograms
4. Termination audiograms

Hearing Protection Records

1. Date of initial HP fitting for each employee
2. Brand and size of HP fitted

Employee Training and Education Records

1. Outline of the annual training program
2. Instructor name
3. Attendance sheet

Program Evaluation Records

1. Documentation of the annual review of noise exposure measurements, hearing protector performance and adequacy, and review of employee audiometric data.

NOISE HAZARDOUS OCCUPATIONS

1. Heavy Equipment Operators
2. Tractor and Mower Operators
3. Welders
4. Intermittent Equipment Operation – power generators, grinders, saws, powder actuated tools, jack hammers

SECTION 5.15

Housekeeping, Sanitation and Restrooms

The Commission has implemented this Directive to establish proper housekeeping and sanitation procedures in compliance with Title 29 Code of Federal Regulations (CFR) §1910.141, §1926.25 and §1926.26.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to maintaining a clean, safe and orderly facility/worksite.

APPLICABILITY

This Directive applies to all M-NCPPC facilities and work sites.

DEFINITIONS

Potable Water means water that meets the quality standards prescribed in the U.S. Public Health Service Drinking Water Standards, published in 42 CFR part 72, or water that is approved for drinking purposes by the State or local authority having jurisdiction.

Washing Facility means a basin or similar vessel used exclusively for washing of the hands, arms, faces, and head.

The number of employees means; unless otherwise specified, the maximum number of employees present at any one time on a regular shift.

GENERAL HOUSEKEEPING

All work sites, vehicles, fabrication facilities (shops), warehouse, material laydown areas, offices and parking lot areas shall be kept in a clean and orderly condition.

All tools (construction, service and emergency equipment) shall be kept clean and well maintained.

Walkways, stairways and roadways shall be kept clear to allow the safe movement of persons, material and equipment.

Arrangements shall be made for adequate trash collection receptacles and the emptying of such receptacles on a regular schedule.

Electrical cords, hoses, ropes, conduit, pipe and other hazards shall not be placed in walkways, stairways and work areas in such a manner as to create a tripping hazard. Examples of acceptable methods for avoiding a tripping hazard include: taping the items down, running the items along the area edge or barricading the area.

Scrap materials shall be stacked or stored for disposal or recycling in a neat and orderly manner so as not to interfere with job processes or create hazards.

Employees shall keep their work areas in a clean and orderly manner. Inspections of overall or general work areas shall be conducted on a regular basis, preferably daily with

the results reported to project management and the safety coordinator on a weekly basis as a minimum.

Emergency exits and evacuation routes shall be clearly marked and kept clear at all times.

POTABLE WATER

An adequate supply of potable water shall be provided at all work sites. The potable water system of clients shall not be utilized without authorization.

WATER CONTAINERS and DRINKING CUPS

Portable potable water containers used to dispense drinking water shall be capable of being tightly closed, and equipped with a tap. Water shall not be dipped from containers.

Any container used to distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose. The lid of the container shall be sealed and have date indicating when it was filled with water.

Water containers shall be cleaned periodically with an antiseptic cleaning solution.

The 'common drinking cup' is prohibited.

Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

NON-POTABLE WATER

Non-potable water outlets (such as water for industrial or firefighting purposes only) shall be identified with signs to indicate clearly that the water is unsafe for drinking, washing, or cooking purposes.

There shall be no cross-connection, open or potential, between a system furnishing potable water and a system furnishing non-potable water. Non-potable water systems of clients shall not be utilized without authorization.

WASHING FACILITIES

Washing facilities shall be maintained in a sanitary condition. The washing facilities of clients shall not be utilized without permission.

Washing facilities shall be provided for employees engaged in the application of paints, coating, herbicides, or insecticides, or in other operations where contaminants may be harmful to the employees. Such facilities shall be in near proximity to the work site and shall be so equipped as to enable employees to remove such substances.

RESTROOM FACILITIES (LAVATORIES)

The Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA) requires employees to be provided with prompt access to sanitary and available toilet facilities. The requirements of this section do not apply to mobile crews or to normally unattended work sites if employees working at these locations have transportation readily available to nearby washing facilities that meet the other requirements of this section.

- Lavatories shall be made available in all places of employment.
- Each lavatory shall be provided with hot and cold running water, or tepid running water.
- Hand soap or similar cleansing agents shall be provided.

Individual hand towels or sections thereof, of cloth or paper, warm air blowers, or clean individual sections of continuous cloth toweling, convenient to the lavatories, shall be provided.

Restroom Access for Transgender Workers

Transgender employees will be provided access to restrooms that correspond to their gender identity. For example, a person who identifies as a male should be permitted to use men's restrooms, and a person who identifies as a female should be permitted to use women's restrooms. The individual should determine the most appropriate and safest option for himself or herself.

Whenever practical, a facility may offer:

- Single stall or gender-neutral restroom. This may be the same restroom that can also be made available for use by individuals with disabilities and/or families.
- Use of multiple-occupant, gender-neutral restroom facilities with lockable single occupant stalls.

A transgender employee cannot be compelled to use only a specific restroom unless all other co-workers of the same gender identity are compelled to use only that same restroom.

Toilets at Temporary Worksites and Worksites Requiring the Use of Temporary Toilets

The requirements of this section do not apply to mobile work crews who have transportation to nearby toilet facilities. The minimum numbers of temporary toilets that shall be provided for employees are listed in the following table:

Number of Employees	Minimum Number of Temporary Toilets
1 to 15	1
16 to 35	2
36 to 55	3
56 to 80	4
81 to 110	5
111 to 150	6
Over 150	6 plus 1 additional for each additional 40 employees

**For temporary field conditions (outdoor events), provisions shall be made to assure not less than one toilet facility is available.*

The types of temporary toilets that may be used include the following:

- Privies (where employee use will not contaminate ground or surface water)
- Chemical toilets
- Recirculating toilets
- Combustion toilets

All toilet facilities shall be lockable, located centrally (as practical) to the work crew or crews. Toilet facilities shall be maintained in a sanitary condition and cleaned on a systematic basis.

SHOWERS

Whenever showers are required by a particular standard, the showers shall be provided as defined in this section.

One shower shall be provided for each ten (10) employees of each sex, or numerical fraction thereof, who are required to shower during the same shift.

Body soap or other appropriate cleansing agents convenient to the showers shall be provided.

Showers shall be provided with hot and cold water feeding a common discharge line.

Employees who use showers shall be provided with individual clean towels.

FOOD HANDLING

Persons who perform food-handling services shall maintain their hands in a sanitary condition, and wear food handling hand protection, aprons, and hair restraints.

Food service facilities and operations shall meet the applicable laws, ordinances, and regulations of the jurisdictions in which they are located.

All employee food service facilities and operations shall be carried out in accordance with sound hygienic principles. In all places of employment where all or part of the food service is provided, the food dispensed shall be wholesome, free from spoilage, and shall be processed, prepared, handled, and stored in such a manner as to be protected against contamination.

EATING and DRINKING AREAS

Employees shall not be allowed to consume food or beverages in a toilet room nor in any area exposed to a toxic material.

Eating areas shall be designated and kept in a sanitary condition. On work sites, provisions shall be made to properly dispose of food scraps and trash.

Employees shall not be permitted to eat in areas where food may become contaminated or food may contaminate an environment (e.g., a clean room).

VERMIN CONTROL

Every enclosed workplace shall be so constructed, equipped, and maintained, so far as reasonably practicable, as to prevent the entrance or harborage of rodents, insects, and other vermin. A continuing and effective extermination program shall be instituted where their presence is detected.

CHANGE ROOMS

Whenever employees are required to wear protective clothing because of the possibility of contamination with toxic materials, change rooms equipped with storage facilities for street clothes and separate storage facilities for the protective clothing shall be provided.

TEMPORARY SLEEPING QUARTERS

When temporary sleeping quarters are provided, they shall be heated, ventilated, and lighted.

Temporary sleeping facilities shall be managed and operated in accordance with applicable laws and regulations.

SAFETY PROCEDURES for CUSTODIANS

Proper safety gear should always be used where necessary. Remove snow, ice, fallen branches on steps and walks as soon as possible.

Post signs where there are wet or waxed floors.

Report all safety hazards, if they cannot be fixed on the spot, such as:

- Any broken or loose wire,
- Any loose flooring,
- Tables or chairs (needing repair or removal),
- Any loose or broken concrete in walkways,
- Broken windows or glass of any kind,
- Water pipes or fixtures that are broken, and/or
- Any strange smells (for example, gas leak in kitchen).

SECTION 5.16 Industrial Hygiene

The Commission has implemented this Directive for industrial hygiene complies with Title 29 Code of Federal Regulations (CFR) §1910, Subpart(s) G, J, Z; §1926, Subpart(s) C, D, Z; §1926.51, (c) Table D-1; and ACGIH Standards as referenced and appropriate to the site.

PURPOSE

The purpose of this Directive is to ensure that risk of personal injury, environmental impact, and property damage are controlled for industrial hygiene-related issues.

APPLICABILITY

This Directive applies to all Commission work sites to ensure that those work sites shall be comfortable for all employees and maintained to the highest feasible level of quality.

DEFINITIONS

Qualified means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.

REQUIREMENTS

General

Periodic evaluations of every work site shall be made to determine the degree of risk arising from exposure to chemical, physical, or biological agents. The Risk Management and Safety Office or a designated competent person shall evaluate all work areas (e.g., Industrial Hygienist).

Noise levels shall be controlled where feasible, so as to create and sustain a productive work place for the type of work being conducted.

Supplementary and/or temporary fuel fired heaters shall not be used unless the Risk Management and Safety Office has reviewed the environmental conditions in the area of use.

Work environments involving extreme heat or cold shall be evaluated as necessary.

Buddy systems, acclimatization programs, reduced rate of production, cessation of highly hazardous tasks, increased number of breaks, additional fluid supplements, warming trailers, etc., shall be considered, as appropriate.

AIR CONTAMINANTS

Potential health hazards of air contaminants resulting from industrial operations shall be evaluated by the Risk Management and Safety Office or other designated competent person.

The Risk Management and Safety Office or other designated competent person shall determine what air contaminants should be evaluated further through the use of industrial hygiene monitoring.

Any initial or baseline monitoring shall consist of air monitoring in multiple locations within each worksite depending upon layout and repeated under varying conditions. Changes to the work environment and the continuing effectiveness of engineering controls shall be determined through follow up monitoring.

Personal monitoring shall be utilized to the fullest extent possible. When the results of the air monitoring reveal air contaminants at concentrations equal to or greater than one-half the Permissible Exposure Limit (PEL), engineering controls shall be implemented where feasible to reduce the contaminant level.

Respiratory protection shall be worn in areas with air contaminant concentrations above the Threshold Limit Values (TLV) or the PEL when engineering controls and/or administrative controls do not resolve it first (reference Respiratory Protection Section of this manual). Applicable engineering and/or administrative controls shall continue to be implemented during the use of respiratory protection.

Control devices on equipment shall be regularly inspected and tested. The Risk Management and Safety Office or designated competent person shall evaluate the control techniques and their effectiveness on controlling air contamination. Work site management shall immediately inform the Risk Management and Safety Office of any changes that may affect contaminant concentrations.

ENSURING RELIABILITY of TEST EQUIPMENT

All users of portable gas test equipment shall be trained in proper use, care, inspection and calibration requirements, and limitations of the equipment.

Routine replacement of parts shall be performed in accordance with the manufacturer's written instructions by qualified personnel. All other repairs must be undertaken by the authorized service provider.

The Risk Management and Safety Office should be consulted prior to purchasing/renting a portable air monitor.

Monthly checks (as a minimum) shall be carried out by each test equipment holder. A record of these checks shall be maintained at the work site being tested.

Each test equipment holder shall:

- Have a calibration kit to verify meter calibration prior to each use and on a monthly basis, and calibration checks shall be documented
- Dispatch any instrument not operating properly (or out of calibration) for necessary repair

Each monthly inspection shall be performed to include the following:

Air Monitoring Equipment:

- Inspect the hoses for deterioration (where used)
- Calibrate using appropriate test gases
- Test battery

An external, independent calibration is necessary on a scheduled basis to ensure correct performance of the units. Preventative maintenance shall also be carried out at this time. Each facility is responsible for scheduling the independent calibration and the preventative maintenance.

This external independent check shall take place on or before the DO NOT USE AFTER (date), which is attached to the instrument. Instruments failing to recharge satisfactorily or calibrate through normal adjustments should be dispatched for repair.

Instruction manuals must be kept with each unit. These manuals should be used as a first reference in the event of any questions as to the instrument's performance.

NOISE MONITORING

The Risk Management and Safety Office shall arrange noise monitoring in response to workplace assessments, employee complaints or regulatory requirement.

SECTION 5.17 Ladders

The Commission has implemented this Directive for the use of ladders to comply with Title 29 Code of Federal Regulations (CFR) §1910 Subpart D, Walking-Working Surfaces; §1910.25 Portable Wood Ladders; §1910.26 Portable Metal Ladders; §1910.27 Fixed Ladders and §1926.1051, §1926.1053, and §1926.1060.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of ladders.

APPLICABILITY

This Directive applies to all Commission employees and worksites where ladders are required to be used to conduct work operations. All work activities requiring the use of approved ladders shall be conducted safely with associated exposures eliminated and/or controlled.

DEFINITIONS

ANSI stands for the American National Standards Institute that provides ladders manufacturing guidelines.

Cage means a guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side, rails of the fixed ladder, or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

Cleat means a spacer secured to the side rails between the rungs of a job made ladder.

Competent Person (for ladders) means a person possessing the ability to identify hazardous or dangerous conditions and shall have the authorization to take prompt corrective measures to eliminate these conditions. A Competent Person shall know how to detect hidden defects, as well as the proper procedure to follow when equipment is found to be defective.

Decay means disintegration, tearing, cracking, loose, etc.

Extension Ladder means a non-self-supporting portable ladder adjustable in length. It consists of two sections traveling in guides or brackets that permit length adjustment. Length is designated by the sum of the lengths of the sections measured along the side rails.

Extension Trestle Ladder means a self-supporting portable ladder, adjustable in length, consisting of a trestle ladder base and vertically adjustable single ladder with the means for locking the ladders together. The length is designated by the length of the trestle ladder base.

Fastenings means a device used to attach a ladder to a structure, building, or equipment.

Fixed Ladder means a ladder that is permanently attached to a structure, building, or equipment. It cannot be readily moved or carried because it is an integral part of the building or structure.

Grab bars means individual handholds placed adjacent to or as an extension above ladders for the purpose of providing access beyond the limits of the ladder.

Individual Rung Ladder means a fixed ladder with each rung individually attached to a structure, building, or equipment.

Ladder means a tool usually consisting of two side rails joined at regular intervals by crosspieces called steps, rungs, or cleats, on which a person may step in ascending or descending order.

Ladder Safety Device means any device, other than a cage or well, designed to eliminate or reduce the possibility of accidental falls and which may incorporate such features as life belts, friction brakes, and sliding attachments.

Pitch means the included angle between the horizontal and the ladder, measured on the opposite side of the ladder from the climbing side.

Platform Ladder means a self-supporting ladder of fixed size with a platform at the working level.

Rail Ladder means a fixed ladder consisting of side rails joined at regular intervals by rungs or cleats and fastened in full length or in sections to a building, structure, or equipment.

Railing means a vertical barrier erected along exposed edges of floor openings, wall openings, ramps, platforms, and runways to prevent falls of persons.

Rungs are ladder crosspieces of circular, oval, or semi-square cross-sections on which a person may step in ascending or descending order.

Sectional Ladder means a non-self-supporting portable ladder, nonadjustable in length, consisting of two or more sections that function as a single ladder. The length is designated by the overall length of the assembled sections.

Side-step Ladder means a ladder in which an individual getting off the top must step sideways in order to reach the landing.

Single Ladder means non-self-supporting portable ladder, nonadjustable in length, consisting of only one section. The overall length of the side rail designates its size.

Special Purpose Ladder means a portable ladder which represents either a modification or a combination of design or construction features in one of the general-purpose types of ladders previously defined in order to adapt the ladder to special or specific uses.

Stepladder means a self-supporting portable ladder, nonadjustable in length, having flat steps and a hinged back. Length is designated by the overall length of the ladder measured along the front edge of the side rails.

Steps means a flat crosspiece of a ladder on which a person may step to ascend or descend.

Tread means the horizontal member of a step.

Tread width means the horizontal distance from the front to the back of the tread including nosing.

Through ladder means a ladder from which a person getting off at the top must step through the ladder in order to reach the landing.

Trestle Ladder means a self-supporting portable ladder, nonadjustable in length, consisting of two sections hinged at the top to form equal angles with the base with rungs on each side. The size is designated by the length of the side rails measured along the front edge.

Well means a permanent complete enclosure of at least three sides or gated around a fixed ladder, which is attached to the walls of the well. Proper clearances for a well will give the person who must climb the ladder the same protection as a cage.

REQUIREMENTS

Ladder Selection Criteria

The following table outlines the weight-capacity classifications for approved ladder types:

ANSI TYPE	APPLICATION	WORKING LOAD
IAA	Field/Construction/Service/Shop/Warehouse	375lbs. Maximum
IA	Field/Construction/Service/Shop/Warehouse	300 lbs. Maximum

Only ANSI type IAA and IA ladders are approved to be used by Commission employees

Any future-developed ladder with a rating higher in 'working load' capacity than the ANSI type IAA is acceptable.

Material

Fiberglass: Fiberglass ladders are the leading choice of all materials. These ladders are strong, durable, non-conductors of electricity, non-corrosive and relatively lightweight. These ladders are the best choice when working with or around electricity.

Aluminum: Aluminum ladders are very strong and very light weight. The principal concern is that aluminum ladders conduct electricity and they should never be used near any electrical hazard. These types of ladders are also vulnerable to weakening by chemicals.

Wood: Wood ladders are much heavier than the fiberglass and aluminum ladders. These ladders become very heavy when wet and become an excellent conductor of electricity.

Ladder Types

The Commission's employees use many types of ladders during the business day. Ladders used on a daily basis are classified by the material from which they are constructed (i.e., wood, metal, fiberglass), load capacity, function, and design.

Ladder designs can include portable or fixed in-place ladders. Common types of portable ladders are step, platform, straight, and extension ladders. Fixed ladders are permanently attached to a structure or building and can also be constructed of different materials.

TRAINING

Designated Competent Persons shall provide initial training and annual training to all employees utilizing ladders.

Individual refresher training shall be required of all employees engaged in work-related near miss or injury incidents involving ladders.

All training related to ladders shall include:

- The nature of ladder hazards in the work area
- The correct procedures for the use, placement, maintenance and care in handling all ladder types and styles
- The maximum intended load-carrying capacities of all ladder types and styles

INSPECTIONS

An inspection program is a necessary part of a ladder safety program. All ladders will be inspected as per set requirements or on frequency of use. Portable ladders must be maintained in good condition at all times and inspected frequently.

Ladders shall be visually inspected before and after each use for the following:

- Structural defects such as bent, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components
- Such ladders shall immediately be removed from service and tagged with “**DANGEROUS – DO NOT USE**” sign/tag and immediately reported to your supervisor or a designated competent person
- Ladders that are weak, improperly repaired, damaged, have missing rungs, or appear unsafe shall be removed from the job or site for repair or disposal. Before discarding any ladder make sure that the ladder is disabled and cannot be used for its intended purpose

LADDER USE and TRANSPORTATION

Choosing the Proper Ladder

Before a ladder is used, it shall be determined that a ladder is the best device to use. Scaffolds and mechanical lifts may be a better choice for certain situations. Once a ladder has been determined to be the best option, the proper ladder shall be chosen.

Ladders shall be chosen in accordance with the job to be performed. Choose ladders based on the ladders rated strength, usable height and load specification. The combined weight of the user, their tools and materials shall not exceed the rating of the ladder. Each ladder shall have a duty rating displayed on a label affixed to the ladder.

TRANSPORTING LADDERS

Two employees should carry step ladders over ten (10) feet, and straight/extension ladders twenty (20) feet or greater in length.

Ladders stored on/in vehicles shall be secured from movement at both ends. Materials used in securing such ladders shall be properly sized and inspected for decay before use and discarded if in disrepair.

Ladders projecting more than three (3) feet from the vehicle body shall be marked with a red ‘flag’

PRE-SETUP

All ladders shall be placed on firm, stable ground.

If the ladder is positioned by a door or walkway, ensure that the door is locked or the walkway is barricaded to prevent collisions.

Keep ladders at least ten feet (10) away from energized power lines. Employees shall be trained and instructed to watch for overhead power lines before erecting any ladder.

When using portable extension ladders, identify (before setup) the best location that allows for the proper securing of the ladder at the base and/or top.

Barriers and/or warnings should be posted while working on a ladder in any high-traffic areas.

SETUP and USE

Portable Step Ladders

Ensure that the folding cross braces are locked in the proper position.

Ensure that the bottom area of the ladder is kept clear and free from debris.

Ensure that a portable stepladder is never utilized as a straight or extension ladder (for example, leaning it against an object when climbing).

Place the top step directly under, or slightly in front of the intended work area.

It is the best practice to have someone hold any ladder over twelve (12') feet in height while ascending, descending or performing work.

Never climb higher than the second step to the top of the stepladder.

Never climb the backside of a ladder, straddle or sit on the top step.

PORTABLE STRAIGHT and EXTENSION LADDERS

Place a straight or extension ladder at an angle 4:1. For every 4 feet of height, the base of the ladder should be out 1 foot (i.e., one horizontal foot from the support point).

Setup Directions: With the ladder already leaning at an angle against the surface, place your feet at the feet of the ladder and extend your arms straight. Move the ladder until the point where the palms of your hands meet the rung. At this point the ratio should be approximately 4:1.

Ensure that both side rails make contact with the structure at the load bearing point. If this is not possible, use a cross brace to distribute the load to both side rails.

Straight ladders and extension ladders shall extend at least three feet (3') and approximately three rungs beyond the surface being accessed. Further overlap adds stability.

Ensure that a straight or extension ladder is never placed in a horizontal position as a substitute for a scaffold or a runway between two elevated locations.

Ensure that a straight or extension ladder is never placed directly against a windowpane or sash.

Ensure that the top and bottom areas of the ladder are kept clear and free of debris.

The top of the ladder shall extend three feet (3') above the upper landing and tied off at the top to some secure point.

Never climb higher than the third step to the top of the stepladder.

FIXED LADDERS

Fixed ladders between twenty feet (20') and thirty feet (30') in length shall be provided with cages, wells, ladder safety devices, or self-retracting lifelines.

Top and bottom areas of the ladder should be kept clear and free of debris.

The distance between ladder rungs, cleats and steps shall not exceed twelve inches (12").

Ladder rungs shall be a least seven inches (7") from the wall to which the ladder is attached.

LADDER HAZARDS

There are inherent hazards associated with ladder use. Typical ladder hazards include:

- Insufficient surface resistance on ladder rungs and steps
- Ladder structural failure
- Ladders tipping sideways, backwards, or slipping out at the bottom
- Ladder spreaders not fully open and locked, causing the ladder to "walk", twist or close up when a load is applied to the ladder
- Using metal ladders around electricity
- Using deteriorated ladders
- Using fixed ladders without cages or fall protection

RECOMMENDED GENERAL PRACTICES

- Use a 4 to 1 ratio when leaning a single or extension ladder (e.g., place a 12-foot ladder so that the bottom is 3 feet away from the object the ladder is leaning against)
- Inspect the ladder before using
- Never use a defective ladder
- Tag or mark the ladder so that it will be repaired or destroyed
- Never splice or lash a short ladder together
- Never use makeshift ladders, such as cleats fastened across a single rail
- Be sure that a stepladder is fully open and the metal spreaders locked before starting to climb
- Keep ladders clean and free from dirt and grease
- Never use ladders during strong wind except in an emergency and then only when they are securely fastened
- Never leave placed ladders unattended
- Never use ladders as guides, braces, or skids, or for any other purpose other than their intended purposes
- Never attempt to adjust a ladder while a user is standing on the ladder
- Never jump from a ladder/dismount from the bottom rung

GENERAL RULES for the USE of any STYLE/TYPE of LADDER

All ladders shall only be used as specified by the manufacturer.

Never jump from or onto any ladder. Never slide down a ladder.

Remove any ice, snow, mud or other slippery substance from the rung/steps.

Always use the 3-point rule when climbing up or down. At least two hands and one foot, or two feet and one hand, should be in contact with the ladder at all times.

Always face the ladder when ascending or descending.

Only one person on a ladder at a time.

If tools are needed, they should be carried in a tool belt or pulled up with a rope once the employee has reached his/her destination.

Do not store tools or materials on the top of ladders.

Do not lean out from the ladder in any direction. This type of action could cause the user to lose balance and fall. With a properly positioned ladder the work should always be directly in front of you.

Wear slip resistance footwear for climbing/descending, such as work boots.

Do not use the top two steps of a portable stepladder or the top three rungs on other ladders. Those steps/rungs are necessary for balance only. Obtain a larger ladder if more height is needed.

LADDER SAFETY DEVICES

Safety devices are available for both portable and fixed ladders to prevent a climber from falling. Safety devices for portable ladders include slip-resistant bases, safety tops, and any other device to increase ladder stability. A portable ladder positioned at a location where it may be tipped over by work activities shall be securely fastened at the top and bottom.

Safety devices for fixed ladders include cages (which enclose the stairwell) or a restraint belt attached to a sliding fixture anchored to the ladder.

MAINTENANCE and STORAGE

Maintenance

Ladders shall never be painted (other than for property marking) because paint may hide defects that could lead to ladder failure.

Ladders shall be maintained in accordance with the manufacturers guidelines.

Storage

Never store ladders in such a way that they present a tripping hazard or could potentially fall on employees.

Keep ladders in areas where they will not come into contact with oil, grease or other slipping hazards.

Store and secure ladders in a safe and dry place, out of direct exposure to the sun and other weather elements whenever possible.

Appendices:

Appendix A – Ladder Selection Table

Appendix A - Ladder Selection Table

Trade	Ladder Type	Material	Size	Ladder Rating	Working Load
Aircraft Mechanics	Stepadders	Fiberglass only	Stepadders > 20'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Electrical	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Building and Grounds Maintenance	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
HVAC	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Masons	Stepadders, extension and straight ladders	Fiberglass, wood and aluminum	Stepadders > 12' Straight ladders > 40' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Painters	Stepadders, extension and straight ladders	Fiberglass, wood and aluminum	Stepadders > 12' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Plumbers	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Tree Climbers	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity
Welders	Stepadders, extension and straight ladders	Fiberglass only	Stepadders > 20' Straight ladders > 30' Extension ladders > 48'	ANSI 1A ANSI 1AA	300 lb. Capacity 375 lb. Capacity

SECTION 5.18 Lockout/Tagout

The Commission has implemented this Directive for work activities associated with energized equipment. This Directive complies with Title 29 Code of Federal Regulations (CFR) §1910.147, The control of hazardous energy (lockout/tagout) and §1926.417, Lockout and tagging of circuits.

PURPOSE

The purpose of this Directive is to establish safe practices associated with equipment or processes that involve hazardous energy sources.

APPLICABILITY

This Directive applies to all Commission work sites that perform activities such as, but not limited to, erecting, installing, constructing, repairing, adjusting, inspecting, cleaning, operating or maintaining equipment/machines/processes whereby hazardous energy sources are involved.

DEFINITIONS

Affected Employee means any Commission employee who is not an Authorized Employee but is required to work in the area of equipment/machine/processes where Lockout/Tagout procedures are being implemented.

Authorized Employee means any Commission employee who utilizes Lockout/Tagout procedures on equipment/machines/processes.

Control Mechanism means any lock or combination of locks, multi-lock hasps and/or other types of special mechanisms (chains, valve covers, breaker covers, etc.) applied to an energy-isolating device to ensure that it cannot be moved or operated.

Energized refers to an item being connected to an energy source or containing residual or stored energy.

Energy Isolating Device means a mechanical device that physically prevents the transmission or release of hazardous energy, including, but not limited to the following: a manually operated electrical circuit breaker; a disconnect switch; line valve; slide gate; or device used to block or isolate energy.

Hazardous Energy Source means any type of energy that could injure anyone working on or near the equipment/machine/process if released as a result of work activities. Examples of hazardous energy sources include, but are not limited to the following: electrical; hydraulic (fluids/liquids; pneumatic (air); chemical; radiation; thermal; mechanical (from stored energy, like flywheels and springs); and mechanical (from gravity).

Lockout means the placement of a control mechanism on an energy-isolating device that ensures that the equipment/machine/process being worked on cannot be operated/initiated until the control mechanism is removed.

Other Personnel means non-Commission personnel or visitors to any work area where Commission authorized employees are utilizing processes outlined in the Directive.

Operation Device means any switch, button, lever, valve, etc., that are expressly intended for the starting or initiation of the equipment/machine/process.

Zero Energy State means equipment/machine/process that has been purged of and blocked from hazardous energy sources, that no hazardous energy is present.

RESPONSIBILITIES

The Risk Management and Safety Office is responsible for developing, implementing, and administering this Directive. This involves:

- Training supervisors and employees who perform maintenance or repair work on energized systems.
- Maintaining centralized records of training and inspections performed.
- Providing technical assistance to Commission employees.
- Developing and maintaining the written program, training programs and other training resources that can be used by Commission employees.
- Evaluating the overall effectiveness of this Directive on an annual basis.

Department Responsibilities

Departments are expected to assure that all employees are thoroughly familiar with their safety responsibilities and that safety practices are followed at all times. Departmental worksites should be inspected on a frequent basis to identify and correct hazards.

Supervisors are expected to assure that their employees are appropriately trained and qualified to perform their job duties, and that prompt action is taken to correct identified worksite hazards.

Employees are expected to comply with all safety requirements and act proactively to prevent accidents and injuries by communicating hazards to supervisors.

INITIAL TRAINING

Each affected employee shall receive training on the procedures of this Directive for the expressed purpose of ensuring awareness of the prohibition of removing control mechanisms and/or operation/initiation of applicable equipment/machines/processes.

Affected Employees

Employees who work in an area where Lockout/Tagout (LOTO) procedures are being used (e.g., an *affected employee*) shall be:

- Told about the purpose of the LOTO devices
- Cautioned that they may not remove or bypass a LOTO device
- Prohibited from attempting to start a machine or device that has been locked and/or tagged out

It is the responsibility of each **authorized employee** to convey this information to employees in the work area who may be affected by the LOTO. The Risk Management and Safety Office shall also provide awareness level training on the LOTO requirements on an as-requested basis, and as worksites are identified.

Authorized Employees

Each authorized employee shall receive special training in the recognition of hazardous energy sources, the specific and/or common equipment/machines/processes within respective work areas, types of necessary control mechanisms, and the procedures of this Directive.

Employees who perform the following types of work must be trained:

- Servicing or maintenance of machines or equipment where the unexpected start-up, activation or release of stored energy could cause injury
- Operations where an employee is required to remove or bypass a guard or other safety device
- Operations where an employee is required to place any part of his or her body into an area of the machine where work is actually performed upon the material being processed, or where a similar danger zone exists during the machine operating cycle
- Work on equipment where an energy source itself poses a hazard to the employee (e.g., electrical systems) that must be controlled for the work to be performed safely
- Entry into confined spaces, such as vats, tanks, vaults, and manholes, where the supply lines for chemicals, gases or other materials into the space must be blocked and locked out to prevent the introduction of these materials into the space while employees are performing work

Training must be performed before the employee is assigned duties involving work that will require LOTO. An employee undergoing on-the-job training who has demonstrated the ability to perform duties safely at his or her level of training, and who is under the direct supervision of an authorized person, is considered to be an authorized person for the purpose of those duties.

Re-Training

Re-training will be performed whenever inspections conducted by the employee's supervisor or the Risk Management and Safety Office indicate that an employee has not retained the necessary knowledge or skills to effectively use established LOTO procedures.

Re-training will also be performed whenever there is a change in job assignments, when new machines, equipment or processes are introduced that present a new hazard, or when the energy control procedures change.

RECORDKEEPING

The Risk Management and Safety Office will maintain training records. The employee's supervisor must maintain documentation that the employee has the skills to perform his or her work safely.

When an employee is to work on new or unfamiliar systems or equipment, the employee's supervisor must provide additional training on the hazards involved and the energy control procedures that are to be followed.

SELECTION and USE of WORK PRACTICES

Employees are expected to use approved work practices to prevent injuries that could result from the unexpected start-up of equipment or the release of stored energy. The work practices used must be consistent with the nature and extent of the hazard. Equipment/machinery/processes that have not been de-energized using approved procedures must be treated as energized regardless of whether the parts are, in fact, de-energized.

EQUIPMENT

Locks, tags, chains, gang locks, valve protectors, self-locking fasteners and other hardware must be provided by the department as needed for isolating, securing, blanking or blinding machines, equipment or processes from energy sources.

LOCKOUT DEVICES

Lockout is the safest way to assure that employees are protected from injury. Lockout devices must be used if the machine or system is capable of being locked out. Only authorized employees may use or apply lockout devices, and these devices may only be removed by the individual who installed them except under emergency conditions.

Lockout devices must be:

- Used for controlling hazardous energy and may not be used for any other purpose. All locks shall be key operated.
- Issued to the individual employee, and the tag must indicate the name of the employee applying the device. Employees may only use their own lock. Locks are not to be taken home. Employees may be charged for locks that are lost.
- Durable enough to withstand the environment in which they will be used.
- Used with Tags to provide a visible warning and to supply additional information as necessary.

TAGOUT DEVICES

Tagout devices may be used without a lock only when it is not possible to lock out the system or equipment. If a tag cannot be attached to the energy isolating device, it must be located as close as safely possible to the device, in a position that will be immediately seen by anyone attempting to operate the device. Tags are warning devices only, however, and do not provide the physical protection provided by a lock.

When a tag is used without a lock, the tag must be supplemented by at least one additional safety measure. This safety measure must provide a level of safety equivalent to that obtained by the use of a lock. Additional safety measures include, for example, removal of an electrical breaker, blocking of a controlling switch, or opening of an extra disconnecting device.

Tagout devices:

- Shall be durable enough to withstand the environment in which they will be used.
- Tagout devices may not be used for any other purpose.
- Tags and the attachment device must be substantial enough to prevent accidental removal and must be securely attached to the energy-isolating device.
- Attachment devices must be non-reusable, attachable by hand, self-locking, and require a minimum unlocking strength of greater than 50 pounds.
- Shall show the name of the employee applying the device, and the date and time that work began.
- Shall warn about hazardous conditions that may result if the machine or equipment is energized and must include a legend such as: Do Not Start; Do Not Operate; Do Not Close; Do Not Energize; or, Do Not Open.
- May only be used by authorized personnel.
- Shall not be removed without permission from the person who applied the tag, and it is never to be bypassed, ignored, or otherwise defeated.
- Shall be legible and understandable by all authorized and affected employees.

LOCKOUT/TAGOUT PROCEDURES

Safe procedures for de-energizing circuits and equipment *must* be determined for every piece of machinery or equipment unless *all* of the following apply:

- There is no potential for stored energy or re-accumulation of stored energy after shutdown
- There is a single energy source that can be easily identified and isolated
- The isolation and LOTO of that energy source will completely de-energize and deactivate the machine or equipment

- The machine or equipment is isolated from that energy source and locked out during service or maintenance
- A single LOTO device will achieve a locked-out condition
- The LOTO device is under the exclusive control of the authorized employee performing the work
- The service or maintenance does not create hazards for other employees
- There have been no documented accidents involving the unexpected activation or re-energization of the machine or equipment during service or maintenance

If the energy control procedure (ECP) has not already been developed, or is not detailed in the manufacturers literature, it must be determined by the authorized employee or their authorized supervisor and documented in writing.

The ECP must identify:

- The equipment or system(s), including the physical location of the equipment/system(s) if applicable
- The specific types and magnitude of energy to be controlled, and the techniques to be used to control hazardous energy
- All switches, valves, and other devices that may inadvertently release energy must be identified to be certain that all sources of hazardous energy will be controlled
- The specific steps for shutting down, isolating, blocking and securing the machine, equipment or system to control hazardous energy
- The specific procedure for the placement, removal and transfer of LOTO devices
- The specific requirements for testing the equipment or system to assure that all energy sources have been completely controlled

A generic ECP may be developed for similar machines and/or equipment if the procedure adequately addresses the unexpected energization hazards related to each machine. ECP's are to be maintained in a permanent file in the department and must be made available for review by the Risk Management and Safety Office upon request. When employees are to perform work on equipment covered by this program, they must either determine or document the ECP's at the time of work, or be provided the ECP when the work is authorized.

APPLICATION of LOCKS and TAGS

The following steps are taken during LOTO:

The ECP is reviewed to determine the hazards present, and how these hazards must be controlled. If an ECP has not been developed, and a generic ECP cannot be used, the ECP must be determined and documented in writing by an authorized person.

Affected employees in the immediate area are notified that the system will be locked and/or tagged out, and the reason for this procedure.

The machine, equipment or system is shutdown by disconnecting the energy sources (e.g., depressing the "stop" button, opening toggle switches, closing the valve, and so forth).

All energy isolating devices needed to control all sources of energy are turned off, including all main and secondary energy sources. Electrical switches will not be pulled while under load, nor will fuses be removed in place of disconnecting.

All switches or other energy isolating devices are LOTO in the "off" or "safe" position by authorized employees.

All potentially stored energy that could harm an individual (such as springs, elevated machine platforms or members, rotating flywheels, hydraulic systems, and pressurized air, gas, steam or water lines) are relieved, disconnected, restrained, blocked or otherwise made safe. If it is possible for the stored energy to re-accumulate to a hazardous level, isolation shall be verified and continued until the work is completed or the hazard no longer exists.

The authorized employee verifies that the system has been isolated and de-energized. This is accomplished by pressing all start buttons, verifying that the main disconnect switch or circuit breaker cannot be turned on, and so forth.

Work is performed. Do not bypass LOTO devices until all work is complete.

RELEASE from LOCKOUT/TAGOUT

The following steps are to be taken when the work is completed and LOTO devices are to be removed:

Inspect the work area to be sure that all nonessential items such as tools have been removed, that machine components are fully assembled, and that all guards are in place.

Inspect to ensure that all employees are safely positioned or have been removed from any danger zone. Notify all affected employees that the LOTO devices are being removed, and that the equipment is being reactivated.

Each person removes his or her LOTO device(s).

EMERGENCY LOCK REMOVAL PROCEDURES

If someone is absent from the workplace, his or her lock(s)/tag(s) may be removed provided that:

Every effort shall be made to personally contact the authorized employee prior to their lock being removed.

The supervisor ensures the person is not present at the workplace.

The supervisor ensures that the person is informed at the first opportunity that his or her lock and tag have been removed before he or she resumes work at that workplace.

The supervisor makes a visual determination to ensure that all employees are clear of the circuits and equipment prior to LOTO removal.

TEMPORARY RELEASE from LOCKOUT/TAGOUT

The following procedure is to be followed if a LOTO is temporarily removed from the energy-isolating device to test or reposition the machine.

- Clear the machine or equipment of tools and materials
- Ensure that all employees are clear of the equipment or machine
- The LOTO device is removed by the employee who applied it
- Energize and proceed with testing or positioning
- De-energize all systems and reapply the energy control devices
- Re-test operation devices to ensure zero energy state is in place
- Continue work and repeat this procedure as necessary

GROUP LOCKOUT TAGOUT PROCEDURES

The procedure that is followed for group LOTO must provide a level of protection equal to that provided by use of a personal LOTO. Group LOTO must comply with all portions of this program including the following additional requirements:

An authorized employee must be assigned primary responsibility for LOTO control over the group of workers. This **primary authorized employee** must be able to determine the exposure status of individual members of the group with regard to LOTO of the machine or equipment.

The primary authorized employee implements and coordinates the LOTO of hazardous energy sources in accordance with the specific ECP, and verifies that these steps have in fact isolated the machine or equipment from all hazardous energy sources. This must be accomplished **before** other authorized employees participating in the group LOTO affix their personal LOTO device to the group LOTO box and **before** they perform service/maintenance activities.

Each authorized employee affixes his or her personal LOTO device to the group lockout device and removes these devices when work has been completed. A single lock may be used to lockout the device if the key is placed in a group lockout box that allows the use of multiple locks to secure it.

Each authorized employee participating in the group LOTO has the right to personally verify the effectiveness of the LOTO. An employee who opts to verify the LOTO must perform this verification after affixing his or her personal LOTO device(s) and before performing service/maintenance work.

SHIFT or PERSONNEL CHANGES

When repair or maintenance work extends beyond one shift, employees entering the work area must affix their locks in place before departing employees remove their locks. Verification of the LOTO must be performed on each shift before any authorized employee(s) begins work.

CONTRACTORS and other OUTSIDE PERSONNEL

The department employing the contractor must discuss and understand each other's respective lockout/tagout procedures. The supervisor for the department overseeing the work must ensure that his or her personnel understand and comply with the restrictions of the contractor's energy control procedures.

INSPECTIONS

The ECP's required by this program will be reviewed at least annually by the Risk Management and Safety Office to assure that the procedures and the requirements of this program are being followed. This review will be supplemented by:

- Work site inspections conducted by the Risk Management and Safety Office
- Reports of program deficiencies made by departmental program supervisors
- A review of LOTO records, including site-specific ECP's used or developed during the course of the year

The periodic review will be designed to correct any deviations or inadequacies observed. Authorized employees will be retrained as necessary to address any deficiencies found during this review.

Appendices:

Appendix A - General Lockout/Tagout Checklist

Appendix B - Energy Control Procedure

Appendix C - Group Lockout Tagout

Appendix D – Employees involved in the Group Lockout Tagout Form

Appendix A - General Lockout Tagout Checklist

GENERAL LOCKOUT/TAGOUT CHECKLIST	
<p>This checklist addresses all potential types of energy sources in a generic manner, and is intended to help you evaluate and develop energy control procedures (ECP) when one does not already exist. If you are unsure of the hazard, or uncomfortable determining how to control the energy source(s), talk with your supervisor or contact the Risk Management and Safety Office for assistance. Document the steps that you have taken on the blank ECP Form.</p>	
	<input checked="" type="checkbox"/>
Manufacturer/Model of Equipment or System:	<input type="checkbox"/>
THE GENERAL PROCEDURES FOR THE VARIOUS TYPES OF ENERGY SOURCES ARE AS FOLLOWS:	
<p>If available, review the manufacturers literature and/or wiring and mechanical schematics to assure that all energy sources have been identified, otherwise, inspect the equipment/machine to identify all energy sources. During this inspection do NOT perform work near exposed energized circuits unless you are a person qualified to work on electrical systems, and do NOT put any part of your body in any area where moving parts may cause injury. If you are unsure of the hazard, STOP WORK and contact your supervisor or the Risk Management and Safety Office for guidance.</p>	<input type="checkbox"/>
ELECTRICAL CONTROLS	
<p>Isolate the machine or piece of equipment by using an electrical plug lock or by locking and tagging the disconnect switches. A special adaptor may be needed to LOTO circuit breakers. On the ECP form, document where the LOTO are applied.</p>	<input type="checkbox"/>
<p>Bleed any stored electrical energy to a "zero energy state". If this type of hazard is present, document on the ECP form.</p>	<input type="checkbox"/>
<p>Ensure that all power sources are LOTO by using a tester to check that all circuits are de-energized. Employees that must work on or near exposed energized parts or de-energized electrical parts that have not been LOTO must also be qualified workers as required by the <i>Commission's Electrical Safety Program</i>.</p>	<input type="checkbox"/>
PNEUMATIC CONTROL	
<p>Release the pressure to reach a "zero energy state".</p>	<input type="checkbox"/>
<p>On the ECP form, document where the LOTO are applied. LOTO the energy source(s).</p>	<input type="checkbox"/>
HYDRAULIC CONTROL	
<p>Release the pressure to reach a "zero energy state".</p>	<input type="checkbox"/>
<p>On the ECP form, document where the LOTO are applied. LOTO the energy source(s).</p>	<input type="checkbox"/>
FLUIDS AND GASES	
<p>Evaluate all hoses and valves connecting to the system or equipment. Determine what type of fluid or gas may be present and, if necessary, obtain and review the Material Safety Data Sheet (MSDS) for the material. Take precautions as needed to protect you from exposure to any hazardous material that may be contained in the system. Contact the Risk Management and Safety Office as needed for guidance.</p>	<input type="checkbox"/>
<p>Close all valves on supply lines, and as necessary, bleed or drain the contents. Contact Risk Management/Safety Office for guidance on disposal of the material.</p>	<input type="checkbox"/>
<p>If working on a pressurized system where valve leaks may re-pressurize the line, insert a blank or blind in the line.</p>	<input type="checkbox"/>
<p>Use lockout valves, chains, and locks and tags at the isolating source. On the ECP form, document where the LOTO are applied, and document all related hazards.</p>	<input type="checkbox"/>
MECHANICAL CONTROL	
<p>Release or block all stored mechanical energy. Be cautious of springs, tension, elevated mechanical arms or platforms that could lower, and other sources of energy</p>	<input type="checkbox"/>

that are not always obvious. If needed, restrain the system by inserting blocks.	
On the ECP form, document where the LOTO are applied. LOTO the energy source(s)	<input type="checkbox"/>
Recheck all areas for potential sources of energy.	<input type="checkbox"/>
GENERAL LOTO PROCEDURES	
Review the energy control (ECP) procedure with your supervisor if the procedure, the system, or the equipment is new or unfamiliar.	<input type="checkbox"/>
Review the type and magnitude of the energy and the required controls.	<input type="checkbox"/>
Inform all affected employees, and all other employees working in or entering the work area, that LOTO is to be performed. Instruct these employees that they must not attempt to start equipment that has been locked/tagged out, and that locks/tags must not be bypassed or removed.	<input type="checkbox"/>
Shutdown the equipment/process/system by following the ECP.	<input type="checkbox"/>
Locate the necessary energy isolating device(s) for the equipment/process/system and operate them to isolate them from the energy sources. Affix LOTO devices.	<input type="checkbox"/>
Relieve all stored or residual energy and take appropriate measures to ensure the energy will not re-accumulate. Affix LOTO devices as necessary.	<input type="checkbox"/>
Verify that all sources of energy have been isolated and stored energy relieved after ensuring that employees are not exposed and before beginning work. Activate equipment or system controls to ensure that the equipment or system will not operate, and then deactivate the controls.	<input type="checkbox"/>
PERFORM THE SERVICING OR MAINTENANCE	
Replace all guards and safety devices. Remove all tools and equipment from the work site. Assure that all personnel are clear of the equipment.	<input type="checkbox"/>
Notify all affected personnel that the system will be reactivated.	<input type="checkbox"/>
LOTO devices are removed by the authorized employee(s) who installed the devices.	<input type="checkbox"/>
LOCKOUT/TAGOUT DEVICE REMOVAL BY SUPERVISOR	
<p>If it becomes necessary to remove a LOTO of an employee who is unavailable on site, the removal of this device must be done using the following procedure.</p> <ul style="list-style-type: none"> • The supervisor must ensure that the employee who applied the lock or tag is <u>not</u> available at the workplace; and • The supervisor must make all reasonable efforts to contact the authorized employee to inform him or her that his/her lockout and/or tagout device has been removed; and, • The supervisor <u>ensures</u> that the employee is made aware that his or her lock or tag was removed <u>before</u> he or she resumes work at that worksite. 	
GROUP LOCKOUT/TAGOUT	
When a LOTO job involves numerous LOTO devices and many employees, the group LOTO procedure included in this program should be used.	
CONTRACTORS	
All contractors must comply with the Commission's <i>Safety Requirements for Contractors and Subcontractors</i> .	

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office.

Appendix B – Energy Control Procedure Form
ENERGY CONTROL PROCEDURE

Department:		Location:			Date:		
Equipment/Machine/Process:		Job Description:					
ENERGY SOURCE/TYPE		STEPS TO BE TAKEN TO ISOLATE ALL SOURCES OF HAZARDOUS ENERGY					
Step	Type	Magnitude	Identity (System)	Part of System to be LOTO	Describe where the LOTO is applied	Isolated	
						<input checked="" type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
Stored or Residual Energy Sources to be De-energized and Isolated							
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
<p>If locks cannot be applied, and only tags will be used, describe what additional safety measures will be used in addition to the use of tags: <input type="checkbox"/> Isolating circuit element removal; <input type="checkbox"/> Control switches are blocked; <input type="checkbox"/> Extra disconnecting device opened; <input type="checkbox"/> Valve handles are removed; <input type="checkbox"/> Other (describe):</p>							
Comments:							
Job Performed by:				LO/TO Procedure Authorized/Approved by:		Date:	

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office.

Appendix C – Group Lockout Tagout Form

GROUP LOCKOUT/TAGOUT			
Department:		Location:	
Date:			
Equipment/Machine/Process:			
ECP That is Being Followed:			
Job Description:			
Date Work to Begin:		Date Work to End:	
Primary Authorized Employee:			
Crew/Craft/Department Involved		Contact Name	Phone/ Radio No.
Person Responsible for Coordinating if More Than One Crew:			Phone/ Radio No.
Employees Working under Group Lockout/Tagout (Use Attached Sheet)			
Location of Group Lockout Box:			
Special Instructions:			
Comments:			
Work Completion Date:		Authorized Employee Signature:	
		Date/Time:	

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office.

Appendix D – Employees Involved in the Group Lockout Tagout Form

LOCKOUT/TAGOUT SAFETY PROGRAM EMPLOYEES INVOLVED IN THE GROUP LOCKOUT/TAGOUT				
Department:		Location:		Date:
Equipment/Machine/Process:				
Job Description:				
Date Work to Begin:	Date Work to End:	Authorized Employee (Primary Responsibility):		
Employee Name	ID Number	Department or Crew	Work Started Date/Time	Work Ended Date/Time
Work Ready to Begin (Authorized Employee):		Work Complete (Authorized Employee):		
Date:		Date:		

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office

SECTION 5.19

MAIL HANDLING & HANDLING SUSPICIOUS PACKAGES

In October 2001, four people died from inhalation anthrax and an additional thirteen developed cutaneous or inhalational disease as a result of intentional terrorist activity. In most cases seen thus far, the disease was linked to unexpected workplace exposures to anthrax spores contained in letters mailed through the United States Postal Service. Fortunately, the number of workplaces contaminated with the spores, have also been limited. Nevertheless, employers and workers have a heightened awareness about possible exposure to Anthrax and other biological and physical threats in the workplace.

In light of current concerns about the presence of anthrax spores in the workplace, the Occupational Safety and Health Administration (OSHA) developed a Risk Reduction Matrix to provide basic advice and suggest protective measures to reduce the risk of exposure. OSHA's recommendations do not impose and are not intended to result in placing any new legal obligations or constraints on employers or the States. The Commission, however, has utilized these recommendations in the development of procedures for the safe handling of mail.

PURPOSE

The purpose of this Directive is to establish prudent work practices for handling mail safely and to establish procedures for handling incidents involving suspicious mail and packages. With best practices and information from the Centers for Disease Control (CDC), OSHA, the U.S. Postal Service (USPS), the Federal Bureau of Investigation (FBI) and local police information bureaus, the following protocol was developed for the handling and distribution of mail in Commission facilities.

This Directive applies to small mailroom operations; including sorting, distributing, and handling mail. The guidelines emphasize preventing the spread of biological and chemical agents, i.e., Anthrax and Ricin, through careful handling and isolation of suspicious packages and their contents.

APPLICABILITY

These procedures apply to all employees that work in Commission mailrooms and handle, sort or distribute mail.

REGULATORY GUIDELINES

OSHA recommends the following matrix for making informed decisions about the level of risk (see matrix and pyramid below). Procedures for the safe handling of mail were developed based on the level of risk exposure as outlined in the matrix/pyramid below. This information can be found on OSHA's website at www.osha.gov.

WORKPLACE RISK PYRAMID

RED ZONE:

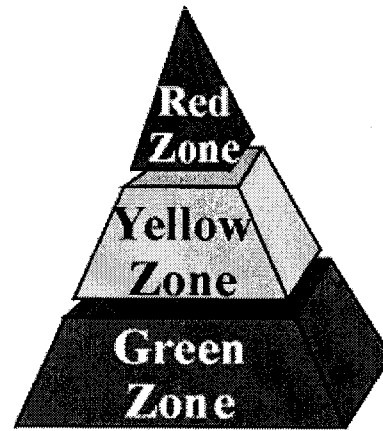
Workplaces Where Authorities Have Informed You That Contamination Has Been Confirmed or Is Strongly Suspected

YELLOW ZONE:

Workplaces Where Contamination Maybe Possible

GREEN ZONE:

Workplaces Where Contamination Is Unlikely



This matrix is intended to help employers understand how to assess the risk of exposure to anthrax spores and other biological agents in their workplaces and to make the necessary decisions to successfully protect their workers from this exposure. The level of risk in any particular workplace is based upon factors such as:

- Current patterns of workplaces contaminated with biological agents
- The likelihood of the workplace being a target for contamination
- The proximity of a workplace or workstation to areas known to be contaminated The likelihood of the workplace receiving mail or other items from a contaminated facility
- Any information provided by law enforcement or public health officials about the workplace's risk of receiving contaminated items
- The amount of mail the workplace receives
- The type of workplace - for example, a post office, bulk mail center, or public or private mail room where cross-contamination might be possible
- The potential that workplace operations and tasks could result in exposure if contaminated mail is received
- The use of high speed mail handling equipment, or other processes that might aerosolize agents during processing
- Any other information or analysis that would indicate the workplace might be contaminated

Due to the close proximity of the Commission to other facilities in the Washington, D.C. Metropolitan area where incidents of contamination of mail have been confirmed, there is the possibility of some Commission facilities falling in the Yellow Zone. Therefore, procedures have been developed in accordance with OSHA's recommendations for workplaces where contamination is possible.

Upon notification by law enforcement or public health authorities that a facility is strongly suspected or confirmed as having been contaminated with biological/chemical agents, the Commission will follow instructions given by law enforcement and public health agencies and communicate information to employees accordingly.

TRAINING:

Employees working in the Commission's mail processing centers and those who regularly handle and respond to public mail should be trained in the procedures listed below. At a minimum, the training should include the following information:

- Procedures for the safe handling of mail
- How to spot suspicious mail or packages
- Modes of transmission
- Signs and symptoms of infections
- Emergency procedures to deal with possible contamination
- Protective clothing to minimize skin exposure
- Care for abrasions that might provide an infection route
- Post exposure procedures

DEFINITIONS:

Anthrax –causes an acute bacterial infection of the skin, lungs or gastrointestinal tract. Infection occurs most commonly via the skin. The cutaneous or skin form of the infection occurs most frequently on the hands and forearms of persons working with infected livestock or contaminated animal products and represents 95% of cases of human anthrax. It is initially characterized by a small solid elevation of the skin, which progresses to a fluid-filled blister with swelling at the site of infection. The scab that typically forms over the lesion can be black as coal, hence the name anthrax-Greek for coal. With treatment, the fatality rate is less than 1% among people who get the skin form of the disease.

Ricin-a natural highly toxic compound that comes from castor beans, used to make castor oil.

Biological Contaminants – are agents derived from, or that are, living organisms (e.g., viruses, bacteria, fungi, and mammal and bird antigens) that can be inhaled and can cause many types of health effects including allergic reactions, respiratory disorders, hypersensitivity diseases, and infectious diseases.

Personal protective equipment: protective equipment for employees working in mail handling/processing work sites must be selected on the basis of the potential for cutaneous or inhalational exposure to anthrax spores. Handling packages or envelopes may result in cutaneous exposure. Persons who hand sort mail or work at other sites where airborne particles may be generated (e.g., where mailbags are unloaded or emptied) may also be exposed through inhalation. The Centers For Disease Control recommends the following personal protective measures to protect against potential exposure:

- **Gloves:** Protective impermeable gloves should be worn by all employees who handle or process mail. In some cases, employees may need to wear cotton gloves under their protective gloves for comfort and to prevent dermatitis. Skin rashes and other dermatological conditions are a potential hazard of wearing gloves. Latex gloves should be avoided because of the risk of developing skin sensitivity or allergy. Gloves should be provided in a range of sizes to ensure proper fit. The choice of glove material should be based on a nitrile, vinyl material. Surgical gloves are not necessary.
- **Clothing:** Employees should consider wearing long-sleeved clothing and long pants to protect exposed skin.
- **Dust Mask:** A respirator designed to filter dust particles. This type of respirator will not protect against gases, vapors, or very small solid particles of fumes or smoke. Dust mask does not protect against inhalational anthrax. It can help protect against cutaneous anthrax by protecting the skin.

DISCLAIMER:

The Administrative Procedures outlined in this report are merely guidelines the Commission adopted from the CDC, OSHA, FBI, and the U.S. Postal Service. There are no guarantees that following these procedures will prevent exposure to intentional terrorists activities such as those witnessed in September and October 2001.

The Personal Protective Equipment should be provided on a voluntary basis, upon request by employees. There are no specific requirements by law for wearing them in mailrooms at this time. Employees electing to wear respirators should read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator limitations. Employees must take certain precautions to be sure that the respirator itself does not present a hazard.

The Risk Management and Safety Office will continue to monitor recommendations by the appropriate agencies and up date this Directive when additional information is available that materially changes this Directive.

MAIL HANDLING KITS:

Each mailroom shall be provided a mailroom kit containing at a minimum the following items:

Gloves (as defined above)
Zip lock bags
Duct tape
Dust Masks
Biohazard containers/bag

SECURITY AND CONTROL MEASURES FOR MAIL ROOM:

- Each facility should develop strategies for limiting the number of persons working at or near areas where airborne particles may be generated (e.g., places where mailbags or packages are unloaded or emptied).
- Restrict the number of non-essential personnel (e.g., contractors, visitors, etc.) entering areas where particles may be generated.

Characteristics of Suspicious Packages and Letters:

- Discoloration, oily stains, or an unusual odor
- Crystals, powder-like residue on the surface
- Suspicious or threatening language on the outside of package or letter
- Postmark that does not match return address or no return address
- Restrictive endorsements such as "Personal" or "Confidential"
- Distorted handwriting, block-printed or poorly typed addresses
- Excessive tape or string
- Rigid, uneven, irregular, or lopsided package
- Package with soft spots, bulges, or excessive weight
- Excessive postage
- Title but no name or incorrect title

PROCEDURES FOR HANDLING SUSPICIOUS MAIL

In accordance with the CDC, OSHA, the FBI and the USPS, the following work practices should be followed for safe handling of mail and packages:

- Be on the lookout for suspicious envelopes or packages
- Do not open suspicious mail
- Open mail with a letter opener or another method that minimizes skin contact with the mail

- Open mail with a minimum amount of movement
- Do not blow into envelopes
- Keep hands away from nose and mouth while opening mail
- Turn off fans, portable heaters, and other equipment that may create air currents while opening mail
- Wash hands after handling mail

Train employees on characteristics of suspicious mail and how to respond. The following procedures must be followed for handling mail that appears to contain a suspicious powder or other substance:

- Notify the Park Police immediately.
 - **Montgomery County Division at (301) 949-3010**
 - **Prince George's County Division at (301) 459-3232**
- Do not shake, smell, taste or empty the contents of any suspicious envelope or package.
- Place the envelope or package in a plastic bag or some other type of container to prevent leakage of contents. If you don't have a container, then cover the envelope or package with anything (e.g., clothing, paper, trash can, etc.) and do not remove this cover.
- Leave the area and close the door, or section off the area to prevent others from entering.
- Wash hands several times using soap and warm water.
- Notify your immediate supervisor.
- Notify the Risk Management and Safety Office at (301) 454-1693 and (301) 454-1681.
- List all people who were in the room or area when the suspicious letter or parcel was recognized. Give this list to the Park Police.
- Park Police will coordinate all efforts, including decontamination of the area that might be suspect. Do not return to the area until it's been cleared by the proper authority.

POST-EXPOSURE PROCEDURES:

- Park Police should interview all potential victims and document names, addresses, and phone numbers.
- A copy of the report must be sent to the Risk Management and Safety Office.
- Employees should receive medical attention to ensure there was no direct exposure.
- Decisions to provide treatments for Biological Treat Agents should be made by health authorities.
- A referral to the Employee Assistance Program (EAP) should be made to potentially exposed employees.
- The Risk Management and Safety Office shall relay sample results to exposed employees once available to initiate additional medical procedures or to eliminate fear and anxiety if tests are negative.

DECONTAMINATION AND SHUTDOWN PROCEDURES:

Upon notification of confirmed contamination by Public Health Officials, Commission Officials will follow the instructions given by law enforcement and public health agencies. The contaminated facility will be evacuated immediately and shut down for clean up by Hazardous Waste Operations and Emergency Response (HAZWOPER) Specialists.

Appendix A

RED ZONE:

Workplaces Where Authorities Have Informed You That Contamination Has Been Confirmed or Is Strongly Suspected



Red zone guidance addresses two situations:

- The employer is notified by law enforcement or public health authorities that a facility is strongly suspected of or confirmed as having been contaminated with a bio agent.
- The employer is engaged in emergency response to and clean-up of bio-terrorist releases of agents.

Notification of an Exposure Incident by Authorities:

Actions taken by an employer under these circumstances may vary depending on the specific facts and the nature of the incident. Employers should follow instructions given by law enforcement and public health agencies and convey appropriate information to employees.

Emergency Responders, Clean-up Personnel, and Investigators Recommended Work Practices :

- Emergency response to, and investigation and clean up of sites contaminated through bio-terrorist acts is specialized work that must be performed by highly trained and qualified personnel.
- OSHA's Hazardous Waste Operations and Emergency Response Standard, also known as HZWOPER, ([29 CFR 1910.120](#)) applies to these operations. The HAZWOPER standard protects workers who respond to uncontrolled or emergency releases of hazardous substances and clean up of sites contaminated with these substances. Under the standard, the definition of hazardous substances includes both chemicals and biological agents, and a bacterium like anthrax, which can cause disease and death, is covered under the definition.
- The HAZWOPER standard provides protection through common sense requirements like emergency planning, training, exposure monitoring, and exposure control through protective measures such as work practices and personal protective equipment (PPE).
- HAZWOPER requirements are performance-oriented and are based on the risk an employer anticipates his/her employees will face. Each employer should review the requirements and choose the best way to apply them to specific emergency or cleanup operations.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Like the other requirements under HAZWOPER, the PPE requirements are performance-oriented. This means that the level of protection chosen, and the PPE used should be proportional to the risk anticipated for the task workers will do. OSHA provides the following recommendations, which are based on our recent experience with workplaces contaminated . In most recent instances, exposure has generally resulted from contact with or dispersal from a contaminated letter or package. As a result, many workers investigating suspected releases or cleaning up these types of releases may be able to respond in Modified Level C protection, outlined in Number 1 below. Terrorist releases of anthrax spores where there is no information about the potential source or dispersal method, or where the release is still occurring, will require that workers respond in higher levels of protection, as outlined in Numbers 2-3 below.

1. Modified Level C protection should be adequate during the investigation and cleanup of a known anthrax release where the agent was dispersed from a letter

or package that can be easily bagged and there is no potential for splashing potentially contaminated materials. Modified Level C cannot be used if anthrax spores were dispersed using an aerosol-generating device, like a garden duster, or there is no information about how anthrax spores were released. Modified Level C should be consistent with the description in HAZWOPER Appendix B, but employees should wear a tight-fitting, full-face Powered Air-Purifying Respirator (PAPR) and skin protection with an integral hood and booties. Note: Selection of respiratory protection should be consistent with OSHA's Respiratory Protection Standard (29 CFR 1910.134) and take into account the agents used for decontamination. If organic vapor cartridges are used, then a cartridge change schedule should be implemented

2. Level B protection should be adequate during response to or clean up of a release where anthrax spores may have been dispersed with an aerosol-generating device but are no longer being released, or where there is a high potential for splashing potentially contaminated materials. Level B protection is a PPE ensemble that provides the highest level of respiratory protection, but a lesser level of skin protection than Level A. Level B protection should be consistent with the description in HAZWOPER Appendix B.
3. Level A should be adequate for response to or clean up of a release that involves an unknown dispersal method. Level A protection should also be adequate during response to or clean-up of a release that involves an aerosol-generating device and the release is still occurring, or the release has stopped but there is no information about the duration of the release or the airborne concentrations of anthrax spores. Level A protection is a PPE ensemble that provides the greatest level of skin, respiratory, and eye protection. Level A protection should be consistent with the description in HAZWOPER Appendix B.
4. Personnel assisting in decontamination of emergency responders or clean-up personnel should be in PPE that is equivalent to one level below that required for the responder or clean-up personnel (e.g., if responder in Level A, then decontamination personnel in Level B).

Appendix B



YELLOW ZONE:

Workplaces Where Contamination Is Possible

This zone is where workplace contamination is possible. Risk factors that should be considered in this zone include handling bulk mail, handling mail from facilities that are known to be contaminated, working near equipment such as high-speed processors/sorters that could aerosolize anthrax spores; workplaces in close proximity to other workplaces known to be contaminated; or workplaces that may be targets of bio-terrorists.

Engineering controls are the most effective controls an employer can use to protect employees. The Centers for Disease Controls and Prevention (CDC) provide a list of suggested engineering controls in Recommendations for Protecting Workers from Exposure to Bacillus anthracis in Work Sites Where Mail Is Handled or Processed.

PRUDENT WORK PRACTICES:

- Follow OSHA's recommendations for green zone workplaces for workers who open mail or respond to suspicious envelopes or packages.
- Develop strategies to limit the number of persons working at or near areas where airborne particles may be generated (e.g., mail-sorting machinery, places where mailbags are unloaded or emptied).
- Restrict the number of non-essential personnel (e.g., contractors, visitors, etc.) entering areas where airborne particles may be generated.
- Avoid practices that generate dust, such as dry sweeping, dusting, and using compressed air to clean machinery. Areas should be wet-cleaned or vacuumed with an industrial vacuum cleaner equipped with a high-efficiency particulate air (HEPA) filter. Conventional home or industrial vacuums should not be used since these vacuums may further disperse possible anthrax spores.
- Instruct employees to wash hands regularly with soap and water. At a minimum, hands should be washed when gloves are removed, before eating, and at the end of a shift.
- Establish procedures in the emergency plan for employees to report possible exposure and contact authorities:
 - Contact supervisor
 - Notify local police and local FBI
 - Give workers information and training on:
 - Modes of anthrax transmission
 - Signs and symptoms of anthrax infection
 - Emergency procedures to deal with possible contamination
 - Protective clothing to minimize skin exposure
 - Care for abrasions that might provide an infection route

PERSONAL PROTECTIVE EQUIPMENT (VOLUNTARY)

- Impermeable gloves such as nitrile or vinyl
- Properly fitted, NIOSH-certified filtering facepiece (N95 or greater). See Appendix D of OSHA's Respiratory Protection standard for information about the use of respirators when such use is voluntary 29 CFR 1910.134 Appendix D.
- Respirators equipped with P-type filters in areas where oil mist from machinery is present should be considered to ensure filter effectiveness.

INFORMATION RESOURCES

OSHA Fact Sheet and References on Worker Health and Safety Inspection Procedures for the Respiratory Protection Standard (See discussions on voluntary use)



Appendix C

GREEN ZONE:

Workplaces Where Contamination with Anthrax Spores Is Unlikely

This zone covers the vast majority of workplaces in the United States. Since October 2001, anthrax spores have only been discovered in a very limited number of workplaces.

PRUDENT WORK PRACTICES

Establish procedures for safe handling of mail and packages. Employees should:

- Be on the lookout for suspicious envelopes or packages.
- NOT open suspicious mail!
- Open mail with a letter opener or another method that minimizes skin contact with the mail and is least likely to disturb contents.
- Open mail with a minimum amount of movement.
- Not blow into envelopes.
- Keep hands away from nose and mouth while opening mail.
- Turn off fans, portable heaters, and other equipment that may create air currents while opening mail.

Train workers on characteristics of suspicious mail and how to respond. For guidance on identifying suspicious mail, see the Information Resources section below.

Establish procedures for handling mail that appears to contain a suspicious powder or other unusual substance. Employees should:

- Put the letter or package down on a stable surface and do not open or handle it further.
- Alert others nearby.
- Not try to clean up the substance.
- Not remove any items from the area.
- Leave the area and close the door gently.
- Contact their supervisor, designated responder, or other appropriate authority after evacuating.
- Wash hands with soap and water.

Designated responders or other appropriate authority will determine the need for further action.

PERSONAL PROTECTIVE EQUIPMENT (VOLUNTARY)

Employers may wish to consider providing nitrile or vinyl gloves to employees who request them.

INFORMATION RESOURCES

- [OSHA Recommendations for Handling Suspicious Letters or Packages](#)
- [OSHA Anthrax Fact Sheet](#)
- [United States Postal Service, Service Updates, Security of the Mail](#)
- [Federal Bureau of Investigations, Mail Advisory Poster](#)
- [Center for Disease Control](#)

SECTION 5.20 Mobile Cranes and Rigging

The Commission has implemented this Directive for the use of mobile cranes and rigging equipment to comply with Title 29 Code of Federal Regulations (CFR) §1910.181, Derricks; §1910.184, Slings; CFR §1926.251, Rigging equipment for materials handling; §1926.550, Cranes.

PURPOSE:

The purpose of this Directive is to define the procedures and standards that apply to the use, care control, and operation of Mobile Cranes and associated rigging equipment. Requirements for the operation of Overhead and Gantry Cranes is covered in Section 5.22.

APPLICABILITY:

This Directive applies to all Commission employees required to use Mobile Cranes and rigging to perform their assigned work duties.

DEFINITIONS

Mobile Crane refers to a machine for lifting and lowering a load and moving it horizontally, with the hoisting mechanism an integral part of the machine. It is mobile lifting equipment with 2000 pounds or more of lifting capacity, excluding forklifts, boom trucks, tower cranes and digger derricks.

REQUIREMENTS FOR MOBILE CRANES

General Operation of Mobile Cranes

Only persons designated, as competent operators shall be permitted to operate Mobile Cranes. Each work site shall maintain a list of such competent operators where the Commission uses or employs the use of cranes.

Operators shall be competent for the type of Mobile Crane being utilized. Skills must be verified with visual observation of operating skills on a predetermined course that adequately tests the operating skills.

Verification of skills shall be documented.

When a third party provides an operator, the third party must provide written evidence that their employee is a qualified operator in accordance with this procedure or approved equivalent.

Mobile Cranes shall not be operated beyond 75% of their configured lifting capacity at the specified boom length in calm conditions. Any lift 60% or more of a crane capacity requires a lift plan. Any planned load over 50,000 pounds requires a lift plan. A registered Professional Engineer must stamp all lift plans.

Outriggers shall be fully extended when loads are being lifted and placed on outrigger pads to distribute the weight.

The Mobile Crane shall only be operated when it is in the level position.

Prior to any lift, the ground shall be inspected to verify that the surface will bear the weight of the Mobile Crane and its intended load.

Prior to traveling on any road, the weight capacity of that route shall be verified to ensure that the surface will bear the weight of the crane and its intended load.

The swing radius of Mobile Cranes shall be marked with a barrier to warn others (on the ground or in other equipment) of its swing radius.

Only established hand signals shall be used to direct the operator during lifting operations. Only designated persons are permitted to give hand signals to crane operators, except during an emergency. In this instance, any person may give a stop signal.

The operator is responsible for making the decision to initiate the lift.

Operators are required to wear the minimum required PPE.

Employees shall not be permitted within the Mobile Crane radius or conducting any service activity on a crane while it is being moved, lifting a load, or being operated in any manner.

The boom of Mobile Cranes shall be in the lowered and retracted position when moving from location to location.

Mobile Cranes should not be used to transport or walk loads from one location to another.

During severe storm or weather conditions the Mobile Crane boom shall be lowered or placed in a position that precludes damage to the crane itself or immediate surroundings.

Inspection of Mobile Cranes

Certification and inspection requirements are often subject to local requirements that must be identified before any lifts are made.

The operator or other designated competent person shall inspect Mobile Cranes prior to their use each day for defects, and unsatisfactory conditions.

These inspections shall be documented. If defects or other unsafe conditions are found during an inspection, the Mobile Crane shall be taken out of service until repairs have made. A record of repairs and associated maintenance of cranes shall be documented.

Providers of rental or leased cranes shall provide proof to the Commission that the annual inspection of their equipment is current. A copy of this annual inspection report should be kept in the operator cab of Mobile Cranes.

MAINTENANCE

Preventive maintenance shall be performed as prescribed by the manufacturer as detailed in the owner's manual. An outside contractor qualified to perform maintenance shall perform maintenance of the units.

ADJUSTMENTS AND REPAIR

Any unsafe condition noted during the inspection of the Mobile Crane shall be repaired before the crane is used.

TRAINING

Employees required to operate a Mobile Crane shall be required to participate in and successfully complete the curriculum of a training program before assuming their responsibilities. The Risk Management and Safety Office shall arrange training.

Curriculum

The curriculum of the training program shall, at a minimum, address the following topics:

1. Wire rope/Slings
2. Occupational Safety and Health Administration (OSHA) and American National Standards Institute (ANSI) standards
3. Hoisting equipment manual and power
4. Operation and safety awareness including lock and tag procedures
5. Basic rigging
6. Field training and trials
7. Inspection procedures

Retraining

Employees shall be required to participate in annual refresher training. Retraining may also be deemed necessary when it has been documented that the operator has failed to operate the Mobile Crane in a safe and appropriate manner as directed by this policy and according to OSHA and ANSI regulations.

Curriculum for retraining shall cover the same topics as the initial training.

RIGGING (SLINGS, HOOKS AND CHAINS)

General

All rigging hooks and hooks on Mobile Cranes, except shagging hooks shall have a safety latch or be "moused."

Each sling shall be accompanied with a "Sling Rating Tag." This tag will identify the maximum amount of load the sling is able to sustain.

Slings, hooks, and other rigging equipment shall be used in accordance with their designed purpose and manufacturer specifications.

Tag lines shall be used to guide and control loads that are being lifted and moved. Employees shall not be allowed to guide loads directly with their hands.

Employees shall be required to keep clear of loads being moved and lifted.

Employees shall not be permitted to ride or be on suspended loads being lifted or moved by Mobile Cranes.

Rigging equipment such as nylon slings, and wire rope slings shall not be used in conjunction with personnel fall protection equipment or fall protection systems. This includes using rigging equipment as anchor points, beam wraps, or an extension of a fall arrest system.

Inspection of rigging

An inspection program for all slings, hooks, and chains shall be implemented wherever slings, and hooks are used in rigging and to lift loads. Manufacturer guidelines shall be followed for inspections.

Defective rigging equipment shall be tagged "Do Not Use" and taken out of service and removed from the work area if practical. If repairs cannot be made or repairs are prohibited, the equipment shall be destroyed or returned to the owner.

A competent person shall periodically inspect the condition of lifting hooks. Hooks that are deformed, or stretched 10% of the throat or 15% twist shall be removed from service, and destroyed.

Personnel Basket Use

Requires prior approval by the Risk Management and Safety Office and shall be considered in accordance with OSHA as the least preferred method of personnel transport.

Overhead Clearance

The operation of mobile equipment near energized electrical power lines shall conform to the appropriate section of the Commission's Electrical Safety Directive.

A person shall be designated to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.

Cage-type boom guards, insulating links, or proximity warning devices may be used on Mobile Cranes, but the use of such devices shall not alter the requirements of any other regulation of this part even if such device is required by law or regulation.

Any overhead wire shall be considered to be an energized line unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line and that it has been visibly grounded.

Prior to work near transmitter towers where an electrical charge can be induced in the equipment or materials being handled, the transmitter shall be de-energized or tests shall be made to determine if electrical charge is induced on the crane. The following precautions shall be taken when necessary to dissipate induced voltages.

The equipment shall be provided with an electrical ground directly to the upper rotating structure supporting the boom; and ground jumper cables shall be attached to materials being handled by boom equipment when electrical charge is induced while working near energized transmitters.

Employees shall be provided with nonconductive poles having large alligator clips or other similar protection to attach the ground cable to the load.

Load Moment Indicators

All Mobile Cranes shall have an integral Load Moment Indicator (LMI) installed by an authorized representative of the manufacturer of the LMI and provide the written certification of the installation. The written certification shall be kept in or on the crane.

Regular maintenance of the Mobile Crane and the LMI shall be up to date and presented to the Commission upon request.

The operator shall be qualified and competent in the use of the LMI system and determined by their employer and the LMI manufacturer's representative.

The employer of the operator shall maintain the operators qualifications to use the LMI and shall present them to the Commission upon request.

Anti-two Block

All Mobile Cranes shall be equipped with a positive acting device known as an "anti-two-blocking device".

The anti-two-blocking device prevents contact between the load block or overhaul ball and the boom tip. The anti-two-blocking device activates a remote signaling device (flashing lights, bells, buzzers, or horns) to warn the operator of the approaching two-block situation

SECTION 5.21 OSHA Recordkeeping

The Commission has implemented this Directive for the reporting of OSHA statistics and complies with Title 29 Code of Federal Regulations (CFR) §1904 Recordkeeping and Reporting Occupational Injuries and Illnesses.

PURPOSE

The purpose of this Directive is to ensure such regulatory requirements are maintained and utilized for analysis purposes.

APPLICABILITY

This Directive applies to all incidents occurring in the course of and/or arising from work activities conducted by Commission employees or other employees under the direction of Commission supervision.

DEFINITIONS

First Aid means the following types of treatment:

- Using non-prescription medications at non-prescription strength
- Administering tetanus immunization(s)
- Cleaning, flushing, or soaking wounds on the skin surface
- Using wound coverings, such as bandages, 'BandAids', gauze pads, etc., or using 'SteriStrips' or butterfly bandages
- Using hot or cold therapy
- Using any totally non-rigid means of support, such as elastic bandages, wraps, etc.
- Using temporary immobilization devices while transporting an employee, such as splints, slings, neck collars, or back boards
- Drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters
- Using eye patches
- Using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye
- Using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas OTHER than the eye
- Using finger guards
- Using massages
- Drinking fluids to relieve heat stress

Illness can be classified as a skin disease/disorder, respiratory condition, poisoning, or other illnesses resulting from an event in the work environment. Examples include, but are not limited to:

- Contact dermatitis
- Eczema
- Silicosis
- Asbestosis
- Toxic inhalation
- Poisonings by lead, mercury, or other metals
- Poisonings by carbon monoxide, hydrogen sulfide, or other gases
- Poisonings by organic solvents or by other chemicals

- Heatstroke, sunstroke, heat exhaustion, or other heat-related factors
- Freezing, frostbite, or other cold-related factors
- Effects of Non-ionizing radiation (welder's flash or lasers)
- Bloodborne Pathogenic diseases

Injury means any wound or damage to the body resulting from an event in the work environment. Examples include:

- Cut/laceration
- Puncture
- Abrasion
- Contusion/bruise
- Fracture
- Chipped tooth
- Amputation
- Insect bite
- Electrocution
- Thermal, chemical, electrical or radiation burn
- Sprain/strain injuries to muscles, joints and connective tissues when the result from a slip, trip, fall or other similar accident

Medical Treatment means the managing and caring for a patient for the purpose of combating disease or disorder. The following activities are **NOT** medical treatment:

- First aid
- Visits to a doctor solely for observation or counseling
- Diagnostic procedures, including the administering of prescription medications that are used solely for diagnostic procedures

OSHA Form 300 (Log of Work-Related Injuries and Illnesses) means a form that is used to classify work-related injuries and illnesses and to note the extent and severity of each case.

OSHA Form 300A (Summary of Work-Related Injuries and Illnesses) means a form that shows the totals for the prior calendar year in each category from the OSHA Form 300.

OSHA Form 301 (OSHA's Injury and Illness Incident Report) means the first form that must be filled out when a recordable work-related injury or illness has been determined, unless the State First Report of Injury contains all of the same information.

Restricted Work means activities where a doctor keeps, or recommends keeping, an employee from doing the routine functions of their job or from working the full workday that the employee would have been normally scheduled, before the injury/illness.

Work-related Injury or Illness means an injury or illness resulting from an event or exposure in the work environment causing or contributing to the condition or significantly aggravating a preexisting condition.

Work Environment includes all work sites where one or more employees are present as a condition of their employment.

REQUIREMENTS

Records Retention

The Risk Management and Safety Office shall obtain OSHA Forms 300, 301 and 300A for use, as noted within this policy manual section.

A central log (Form 300) shall be maintained by the Risk Management and Safety Office for each Commission location.

This log shall contain all OSHA Recordable injuries and illness for all activities reporting to the individual location. This central log shall be maintained and retained for a minimum of five (5) calendar years following the year to which they pertain.

The Risk Management and Safety Office shall retain First Reports of Injury records related for compliance with the retention of OSHA's Form 301.

Determining OSHA Recordability

Work-related injuries or illnesses shall be recorded when they fall within the following categories:

- Death
- Loss of Consciousness
- Scheduled work days away from work
- Restricted work activity or transfer for scheduled workdays
- Medical treatment beyond first aid

If the injury or illness is OSHA Recordable, entry on the applicable Form 300 and completion of the Form 301 (if applicable) shall occur within seven (7) business days.

Some recordable injuries may require reporting to MOSH. The Risk Management and Safety Office is responsible for reporting incidents to MOSH.

Postings

Annually, a Summary of Work-Related Injuries and Illnesses (Form 300A) for the prior calendar year shall be compiled and posted at each location, even if there are zero applicable OSHA Recordables.

This posting shall remain in place from February 1 through and including April 30, beginning with the posting applicable to 2003 (February 1 through April 30, 2004). After this time, facility postings shall be removed and kept on file at the facility.

Federal or State Interpretations

All future Federal and State approved OSHA interpretations applicable to issues within this manual section applying to the recordable reporting to a business unit shall supercede the requirements noted within.

SECTION 5.22 Overhead and Gantry Cranes

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the use, care control, and operation of cranes and associated rigging equipment.

APPLICABILITY

This Directive applies to all Commission employees required to use cranes and rigging to perform their assigned work duties.

The Commission has implemented this directive for the use of cranes and rigging equipment and complies with Title 29 Code of Federal Regulations (CFR) §1910.179, Overhead and Gantry Cranes.

DEFINITIONS

ANSI means the American National Standards Institute.

Brake is a device used for retarding or stopping motion by friction or power means.

Bumper [buffer] is an energy absorbing device for reducing impact when a moving crane or trolley reaches the end of its permitted travel; or when two moving cranes or trolleys come in contact.

Cab is the operator's compartment on a crane.

Clearance means the distance from any part of the crane to a point of the nearest obstruction.

Drum is the cylindrical member around, which the ropes are wound for raising or lowering the load.

Emergency stop switch is a manually or automatically operated electric switch to cut off electric power independently of the regular operating controls.

Hoist is an apparatus, which may be a part of a crane, exerting a force for lifting or lowering.

Hoist chain means the load bearing chain in a hoist.

Hoist motion means that motion of a crane which raises and lowers a load.

Holding brake is a brake that automatically prevents motion when power is off.

Load means the total superimposed weight on the load block or hook.

Load block is the assembly of hook or shackle, swivel, bearing, sheaves, pins, and frame suspended by the hoisting rope.

Main switch is a switch controlling the entire power supply to the crane.

Overhead crane means a crane with a movable bridge carrying a movable or fixed hoisting mechanism and traveling on an overhead fixed runway structure.

Power-operated crane means a crane whose mechanism is driven by electric, air, hydraulic, or internal combustion means.

Rated load means the maximum load for which a crane or individual hoist is designed and built by the manufacturer and shown on the equipment nameplate(s).

Rope refers to wire rope, unless otherwise specified.

Running sheave means a sheave, which rotates as the load block is raised or lowered.

Stop is a device to limit travel of a trolley or crane bridge. This device normally is attached to a fixed structure and normally does not have energy absorbing ability.

Trolley is the unit, which travels on the bridge rails and carries the hoisting mechanism.

GENERAL REQUIREMENTS

The rated load of the crane shall be plainly marked on each side of the crane, and if the crane has more than one hoisting unit, each hoist shall have its rated load marked on it or its load block and this marking shall be clearly legible from the ground or floor.

There shall a minimum clearance of 3 inches overhead and 2 inches laterally maintained between the overhead crane and obstructions.

Only qualified and designated operators shall operate overhead cranes. Trainees under the direct supervision of the qualified operator may operate overhead cranes. *Exception:* Maintenance and test personnel and inspectors, when in the performance of their duties, shall be allowed access only after permission has been granted by the operator.

OPERATIONS

The overhead crane operator shall maintain full attention on the task being performed (e.g., no use of headsets, music).

Universal crane hand signals shall be used during the lift and followed by all those involved in the lift.

No load in excess of the rated capacity shall be lifted, unless for test purposes and the test shall be an engineered lift.

Before leaving the crane unattended, the operator shall land any load, place the controls or master switch in the off position and open the main line device of the specific crane or carrier.

If the crane has been locked out or tagged out, the operator shall not remove the lock or tag, unless the lock or tag has been placed there by the operator. To remove someone else's lock or tag refer to the Commission's Lockout/Tagout Directive.

TROLLEY STOPS

All stops shall be provided at the limits of travel of the trolley and shall be fastened to resist forces applied when contacted.

TROLLEY BUMPERS

All trolleys shall be provided with bumpers or other automatic means of equivalent effect, unless the trolley travels at a slow rate of speed. The bumpers shall be capable of stopping the trolley (not including the lifted load).

GUARDS FOR MOVING PARTS

All exposed moving parts such as gears, set screws, projecting keys, chains, chain sprockets, and reciprocating components, which might constitute a hazard under normal operating conditions, shall be guarded.

All guards shall be securely fastened.

BRAKES

Each independent hoisting unit of a crane shall be equipped with at least one self-setting brake, applied directly to the motor shaft or some part of the gear train.

HOLDING BRAKES

Holding brakes for hoist motors shall have not less than the following percentage of the full load hoisting torque at the point where the brake is applied.

- 125 percent when used with a control braking means other than mechanical
- 100 percent when used in conjunction with a mechanical control braking means
- 100 percent each if two holding brakes are provided

Holding brakes on hoists shall be applied automatically when power is removed.

ELECTRICAL EQUIPMENT

General

The control circuit voltage shall not exceed 600 volts for a.c. or d.c. current and The voltage at pendant push-buttons shall not exceed 150 volts for a.c. and 300 volts for d.c.

Where multiple conductor cable is used with a suspended pushbutton station, the station must be supported in some satisfactory manner that will protect the electrical conductors against strain.

Pendant control boxes shall be constructed to prevent electrical shock and shall be clearly marked for identification of functions.

Equipment

Electrical equipment shall be so located or enclosed that live parts will not be exposed to accidental contact under normal operating conditions.

Electric equipment shall be protected from dirt, grease, oil, and moisture.

Guards for live parts shall be substantial and so located that they cannot be accidentally deformed so as to make contact with the live parts.

Pushbuttons in pendant stations shall return to the "off" position when the crane operator releases pressure.

An undervoltage trip for the main circuit breaker operated by an emergency stop button in the pendant pushbutton in the pendant pushbutton station.

Hoisting equipment

Sheave grooves shall be smooth and free from surface defects, which could cause rope damage.

Sheaves carrying ropes, which can be momentarily unloaded shall be provided with close-fitting guards or other suitable devices to guide the rope back into the groove when the load is applied again.

The sheaves in the bottom block shall be equipped with close-fitting guards that will prevent ropes from becoming fouled when the block is lying on the ground with ropes loose.

All running sheaves shall be equipped with means for lubrication. Permanently lubricated, sealed and/or shielded bearings meet this requirement.

Wire Rope

Rope shall be secured to the drum as follows:

- At least two wraps of rope shall remain on the drum when the hook is in its extreme low position.
- The wire rope end shall be anchored by a clamp securely attached to the drum, or by a socket arrangement approved by the crane or rope manufacturer.

Eye splices

All wire rope clips attached with U-bolts shall have the U-bolts on the dead or short end of the rope.

The spacing and number of all types of clips shall be in accordance with the clip manufacturer's recommendation.

All clips shall be drop-forged steel in all sizes manufactured commercially.
All nuts on the clip bolts shall be retightened after the newly installed wire rope has been in operation for an hour.

Rope Replacement

Replacement rope shall be the same size, grade, and construction as the original rope furnished by the crane manufacturer, unless otherwise recommended by a wire rope manufacturer due to actual working condition requirements.

Rope Inspection

All ropes shall be inspected at least once a month and a certification record, which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the ropes, which were inspected, shall be kept on file.

HOOKS

All hooks shall meet the manufacturer's recommendations and shall not be overloaded.

Hooks shall be visually inspected daily for deformities and/or cracks and monthly inspection with a certification record which includes the date of inspection, the signature of the person who performed the inspection, the serial number, or other identifier, of the hook inspected.

Hooks with cracks or having more than 15 percent in excess of normal throat opening or more than 10° twist from the plane of the unbent hook shall be taken out of service and destroyed.

INSPECTION

Inspection Procedure

All overhead cranes and gantry cranes shall be inspected prior to initial use.

The inspection procedure for cranes in regular service is divided into two general classifications based upon the intervals at which inspection should be performed. The intervals in turn are dependent upon the nature of the critical components of the crane and the degree of their exposure to wear, deterioration, or malfunction.

The two general classifications are herein designated as "frequent" (daily to monthly intervals) and "periodic" (1 month to 12 month intervals) with respective intervals between inspections as defined below:

Frequent Inspections (Daily to Monthly Intervals)

The following items shall be inspected for defects at intervals: **(Required prior to use)**

- All functional operating mechanisms for maladjustment interfering with proper operation.
- Deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems.
- Hooks look for deformities or cracks. Monthly inspection with a certification record which includes the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, of the hook inspected.
- Hooks with cracks or having more than 15 percent in excess of normal throat opening or more than 10° twist from the plane shall be taken out of service and destroyed.

Periodic Inspection (1 Month to 12 Month Intervals)

An overhead crane or overhead gantry cranes that have not been used for a period of one month or more shall be inspected before each use and the focus for such an inspection is as follows:

- All functional operating mechanisms for maladjustment interfering with proper operation.
- Deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems.
- Hooks look for deformities or cracks. Monthly inspection with a certification record which includes the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, of the hook inspected.
- Hooks with cracks or having more than 15 percent in excess of normal throat opening or more than 10° twist from the plane shall be taken out of service and destroyed.
- Check for deformed, cracked or corroded items
- Check for loose bolts or rivets
- Check for cracked or worn sheaves or drums
- Check all hoist chains for excessive wear, including end connectors
- Check all chains for kinks, twists and distorted links and stretches that are beyond what is recommended by the manufacturer
- Inspect the rope for damage such as kinks, cracks, cutting, bending, broken wires, unraveling, corroded or improperly connected end connections

Regardless of how often a crane or overhead gantry is used, the unit shall be inspected annually.

An outside contractor qualified to inspect the unit shall perform the inspection and the contractor shall document and provide the owner with a copy of the findings.

All overhead and gantry crane inspections shall be documented on the approved inspection form. See appendix A.

Cranes not in regular use

A crane which has been idle for a period of 1 month or more, but less than 6 months, shall undergo an inspection conforming to requirements of a frequent inspection.

A crane, which has been idle for a period of over 6 months, shall undergo an inspection conforming to requirements of a periodic inspection.

Testing

New and altered cranes shall be tested prior to the initial use of all the following functions:

- Hoisting and lowering
- Trolley travel
- Bridge travel
- Limit switches, locking and safety devices

Rated Load Test

Each crane shall undergo an annual rated load test. The rated load test shall not be more than 125 percent of the rated load unless otherwise recommended by the manufacturer.

The rated load test reports shall be kept on file at the facility where the crane is located and shall be accessible to the Risk Management and Safety Office.

MAINTENANCE

A preventive maintenance program based on the crane manufacturer's recommendations shall be established.

Crane Maintenance Procedure:

The following precautions shall be taken before adjustments and repairs are started on a crane:

- The crane shall be run to a location where it will cause the least interference with other cranes and operations in the area.
- All controllers shall be at the off position.
- The main or emergency switch shall be open and locked in the open position.
- A warning or "out of order" signs shall be placed on the crane and on the floor beneath or on the hook where visible from the floor.
- After adjustments and repairs have been made the crane shall not be operated until all the guards have been reinstalled, safety devices reactivated and maintenance equipment removed.

Adjustments and Repairs

All unsafe conditions documented during the inspection process shall be corrected before the operation of the crane is resumed.

Only designated and qualified personnel shall conduct adjustment and repairs on the cranes.

Adjustments shall be maintained on each crane to assure correct functioning of the following components:

- All functional operating mechanisms
- Limit switches
- Control systems
- Brakes
- Power plants

Repairs/Replacements

Repairs or replacements shall be provided promptly as needed for safe operation of the crane for the following:

- Load attachment chains and rope slings showing defects.
- All critical parts, which are cracked, broken, bent, or excessively worn.
- Pendant control stations shall be kept clean and function labels kept legible.

Attaching the Load

- Hoist chains or ropes shall be free of kinks or twists.
- Hoist chains or ropes shall not be wrapped around the load.

- The load shall be attached to the load block by means of approved slings or other devices.
- Prior to lifting the load, the operator shall make certain that the load, sling, attachments, lifting devices and the load block are unobstructed.

Moving the Load

- The person responsible for directing the lift shall make sure that the load is properly secured, balanced and positioned in the sling or other lifting device.
- The person responsible for directing the lift shall make another visual inspection of the hoist chain or rope to make sure there are no kinks or twists.
- The load block shall be brought over the load in a manner that will prevent swinging when lifting the load.
- The chain or rope shall be inspected to ensure that it is properly seated in the chain sprocket or drum groove.
- Lift equipment shall not be used for side pulls.
- The operator shall not lift, travel or lower a load while someone is on the load or hook.
- The operator shall avoid lifting the load over people.
- If the load being lifted approaches the rated load to be handled, the operator shall test the brakes by lifting the load a few inches and applying the brakes.
- The load shall not be lowered below the point where there is less than two wraps of rope on the hoisting drum, unless a lower limit device is provided. If a lower limit device is provided, no less than one wrap shall remain.

Parking the Load

- The operator shall not leave a suspended load unattended.
- The load block of the hoist shall be raised above head level when not in use.

Maintenance

Preventive maintenance shall be performed as prescribed by the manufacturer as detailed in the owner's manual. An outside contractor qualified to perform maintenance shall perform maintenance of the units.

Adjustments and Repair

Any unsafe condition noted during the inspection of the crane shall be repaired before the crane is used.

Training

Employees required to operate overhead cranes shall be required to participate in and successfully complete the curriculum of a training program before assuming their responsibilities. The Risk Management and Safety Office shall arrange training.

Curriculum

The curriculum of the training program shall, at a minimum, address the following topics:

1. Wire rope;
2. Slings;
3. Occupational Safety and Health Administration (OSHA) and American National Standards Institute (ANSI) standards;

4. Hoisting equipment manual and power;
5. Operation and safety awareness including lock and tag procedures;
6. Basic rigging;
7. Field training and trials; and
8. Inspection procedures.

Retraining

Employees shall be required to participate in annual refresher training. Retraining may also be deemed necessary when it has been documented that the operator has failed to operate the crane in a safe and appropriate manner as directed by this policy and according to OSHA and ANSI regulations.

Curriculum for retraining shall cover the same topics as the initial training.

APPENDICES:

Appendix A: Overhead and Gantry Inspection and Maintenance Form

**APPENDIX A
Overhead and Gantry Cranes Inspection and Maintenance Form**

Location:	Building:
Date:	Name:

Safety Inspection Checklist Overhead Crane Inspections		Yes	No	N/A	Comments
1.	Is the rated load of the crane plainly marked on each side?				
2.	If the crane has more than one hoisting unit, does each hoist have its rated load marked on it or its load block?				
3.	Is this marking clearly legible from the ground or floor?				
4.	Is there a minimum clearance of Three (3) inches overhead and two (2) inches laterally provided and maintained between crane and obstructions?				
5.	Are only designated personnel permitted to operate the crane?				
6.	Are stops provided at the limits of travel of the trolley?				
7.	Are bumpers capable of stopping the crane provided where required?				
8.	Do the sheaves and ropes of hoisting equipment meet the requirements.				
9.	Are periodic inspections performed on cranes, hooks, ropes, slings, chains, & hoists in accordance with				
10.	Are all new cranes and extensively repaired or altered lifting devices load tested at 120 % prior to use? Is evidence of the test readily available in the form of the MFG'S written certification or maintenance records?				
11.	Are crane hooks inspected during annual inspection for cracks utilizing magnetic particles or other suitable crack detection / inspection methods?				
12.	Are crane hooks removed from service when the throat opening exceeds more than 15 % of normal, or the hook shows more than a 10 degree twist from the plane of the unbent hook or shows signs of cracks?				
13.	Do hooks have safety closure latches properly positioned and functional?				
14.	Are hoists, chains, slings and hooks marked to indicate the item identification number, load rating and next periodic inspection date?				
15.	Is there any excessive wear, twists, distorted links in the hoist chains and wire ropes				
16.	Check for deterioration or leakage in lines, tanks, valves, drain pumps and other parts.				
Remarks					

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The safety checklist shall be made available upon request for inspection by the Risk Management and Safety Office.

SECTION 5.23 Ozone Action

In the Washington Metropolitan area, the air quality is an area of concern for residents. These concerns are linked to unhealthy ground ozone levels from pollution caused by motor vehicles, factories, consumer and commercial products, etc... The presence of these pollutants, combined with extremely warm weather, can produce poor air quality.

The Commission is committed to protecting the health of our workers and our environment. To that end, the Commission has adopted an Ozone Action Program to help minimize the potential effects of unhealthy ozone levels and resulting poor air quality. The program contains certain measures that may be taken on days where the ozone is expected to reach an unhealthy level. Such days, referred to as Code Red and Code Purple Days, are usually hot, humid, and hazy.

PURPOSE

This Administrative Procedure was first issued to establish the Commission's participation in the Washington/Baltimore Metropolitan Area's Code Red Program. This Ozone Action Program is a voluntary procedure that asks employers to take action when the ozone in the atmosphere reaches an unhealthy level. This document was revised to strengthen the commitment to improving air quality through Voluntary Control Measures as recommended through the Metropolitan Washington Council of Governments (COG).

BACKGROUND

In 1996, the Montgomery County Department of Parks signed a Memorandum of Understanding (MOU) with the Montgomery County Department of Environmental Protection to jointly plan and implement a voluntary Ozone Action Days Program. The program is to reduce the frequency of unhealthy ground level ozone (smog) in the metropolitan Washington area during the 1996 ozone season. In this MOU, the Montgomery County Department of Parks agreed to take several initiatives on Code Red and Code Purple Days. In 1998, the Prince George's County Department of Parks and Recreation issued a directive to staff regarding Air Quality Alerts, which provided recommendations on the unhealthy air quality days.

Notification of unhealthy air quality may also be checked by directly calling the Council of Governments at (202) 962-3200, TTY - (202) 962-3213, or through the website – www.mwcog.org/air.

APPLICABILITY

This procedure applies to all Commission employees.

DEFINITIONS

Code Red – Involves days with *unhealthy* air quality. Temperatures are generally in the 90s to 100s, with humid stagnant air. The air quality index values range from 151 to 200. When the temperature and AQI approach such levels, everyone may begin to experience health effects. Members of sensitive groups may experience more serious health effects. Subsequently, active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.

Code Purple-Involves days with *very unhealthy* air quality. Temperatures are generally in the 90s to 100s, with humid stagnant air. The air quality index values range from 201 to 300. When the temperature and AQI approach such levels, everyone may begin to experience health effects. Members of sensitive groups may experience more serious health effects. Active children and adults, and people with respiratory disease, such as asthma, should avoid outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.

RESPONSIBILITIES AND PROCEDURES

To ensure proper implementation and execution of this program, a list of assigned responsibilities is outlined below:

Risk Management & Safety Office:

This Office will establish a communication program with the Metropolitan Washington Council of Governments, Department of Environmental Programs and Maryland Department of the Environment for notification of unhealthy air quality days.

Upon learning of Code Red or **Code Purple** days, the Office of Risk Management and Safety shall immediately notify Department Heads, Maintenance Supervisors and dispatchers, and Park Police dispatchers for further dissemination of information.

Departments:

Follow Ozone Action Days Program recommendations as set fourth in this Administrative Procedure.

Supervisor:

Ensure that staff members are aware of Ozone Action Days. Supervisors should also ensure that staff members are aware and follow the recommendations set fourth in this Administrative Procedure.

Employee:

Responsible for making supervisors aware of serious health issues affected by unhealthy air quality conditions. Employees may be required to provide medical documentation outlining specific restrictions.

PROCEDURES

The Commission has committed to Voluntary Control Measures in an effort to assist the Washington Metropolitan area in meeting Federal air quality standards for ozone. These programs represent a permanent commitment to emissions-reducing behavior. In order to meet these requirements, the Commission is committed to the following Voluntary Control Measures Program:

- Utilize gas cans that meet OSHA/NFPA requirements and help reduce ground level ozone;
- Purchase paints with low VOC for interior painting;
- Purchase five percent of energy through wind generated energy;
- Implement best practices in the use of indoor pesticide and herbicide applications, including participating in a Voluntary Pesticide Reduction Program for indoor and outdoor use;
- Increase the number of Alternative-Fueled Vehicles in the Commission's fleet;
- On Code Red/Purple Days, implement an episodic ban on the use of lawn, garden and diesel-powered equipment and the refueling of Commission vehicles. Emergency vehicles and essential services are excluded from this requirement.

In addition, the following procedures shall be followed on days designated as Code **Red/Purple** Days:

- Defer mowing areas with gasoline-powered equipment. This includes postponing routine lawn mowing with vehicles not equipped with emissions control devices. Also, avoiding or minimizing the use of other small gasoline powered off road engine-based equipment.
- Postpone using oil-based paints, solvents, and cleaning agents. Reschedule outdoor painting if possible.
- Refuel vehicles after dusk. Additionally, signs should be posted at refueling sites asking employees to refuel after dusk.
- Limit driving and, when possible, combine errands.
- Avoid excessive engine idling.
- Share rides whenever possible.
- Make use of public transportation. On Code **Red/Purple** Days, public transportation is often made available free from County transit services.
- Limit strenuous outdoor work.
- Provide plenty of water for workers assigned outdoors.
- Avoid prolonged exposure to the sun and the elements.
- Assist in patron care. It is important to recognize potential air quality hazards and publicize recommended actions to patrons. Keep children, senior citizens, or those with existing health conditions indoors or shaded areas and involved in passive (not active), non-strenuous activities.
- Individuals with heart or respiratory ailments, emphysema, asthma, or chronic bronchitis should limit their outdoor activities. If breathing becomes difficult, move indoors.

SECTION 5.24

Personal Protective Equipment

The Commission has implemented this Directive for the employee use of personal protective equipment complies with Title 29 Code of Federal Regulations (CFR) §1910 Subpart I, Personal Protective Equipment, §1926 Subpart C, Personal Protective Equipment and the correlating ANSI Standards (Z89.1-1986 head protection, ANSI Z41-1999 protective footwear and ANSI Z87.1 safety eyewear).

PURPOSE

The purpose of this Directive is to establish a specific procedure for the control, use, and care of personal protective clothing and equipment.

APPLICABILITY

This Directive applies to all Commission employees required to use personal protective equipment where there is exposure to potential hazards and hazardous conditions. Employees shall use the appropriate personal protective equipment (PPE) as determined by hazard assessments, training, and local requirements.

DEFINITIONS

ANSI means the American National Standards Institute. Their standards have been adopted throughout government and industry for various types of personal protective equipment.

Competent Person means a person who, because of training and experience, is capable of identifying hazardous or dangerous conditions.

General Use PPE means any PPE that is generally issued to employees for known work site exposures.

Hazard Assessment means investigating the work environment for potential dangers, which could result in injury or illness.

Personal Protective Equipment means devices worn by employees to protect them against hazards in the environment. Examples include safety glasses, face shields, respirators, gloves, hard hats, work boots and hearing protection.

RESPONSIBILITIES

Risk Management and Safety Office:

Has the overall responsibility for developing, implementing and monitoring this Directive.

Provide technical information and assist departments in implementing an effective PPE program in their workplace.

Provide training for PPE instruction, as needed.

Keep copies of employee training records.

Conduct periodic audits of PPE used in the field.

Conduct an annual review of the PPE program and make any revisions as necessary.

Supervisors

Implement all aspects of this Directive, including documentation of the hazard assessment and training. The supervisor has been designated this responsibility, as he/she is involved with the employees on a daily basis.

Conduct hazard assessments and ensure that employees are informed, trained, and provided with the appropriate PPE to be protected from potential hazards associated with job tasks.

Be familiar with the applicable government regulations, safety standards, and prudent safety practices to protect themselves and their fellow workers.

Employee

Comply with the PPE guidelines in this Directive.

Comply with the safety recommendations provided by their supervisors and the Risk Management and Safety Office regarding PPE.

Conduct assigned tasks in a safe manner and wear all assigned PPE.

To attend training sessions provided by their supervisor and/or the Risk Management and Safety Office.

To carry out all required procedures as outlined in the training sessions.

Report any unsafe or unhealthy work conditions and job related injuries or illnesses to their supervisor immediately.

REQUIREMENTS

Supervisors using the recommendations of the Risk Management and Safety Office shall select all PPE to be provided to their employees.

PPE is to be made available to each employee for controlling exposures to applicable hazards. The first and foremost means of protecting employees from injuries or exposures is to eliminate the exposure, the second is Engineering Controls, and the third is PPE. PPE is a means of preventing injury or exposure when exposure elimination and/or Engineering Controls are not possible.

HAZARD ASSESSMENT

PPE is selected based on the hazards of the job. The hazard assessment is the formalized way of examining a task and identifying the hazards of job to determine what PPE shall be provided to the employee to eliminate work hazards.

Prior to any personal protective equipment being selected for any worksite, a hazard assessment shall be performed for each specific task or work area.

Upon completion of each hazard assessment, a certification of PPE hazard assessment shall be written and maintained on file with the employing department.

The hazard assessment forms must be completed and signed by a supervisor to certify that this process has been performed as required. The completed hazard assessments shall be maintained with the departmental records.

A PPE hazard assessment shall be conducted whenever there is a change in operations, processes, machinery or any other conditions that may promote, create or produce any potential physical or health hazard.

TRAINING

Initial

Employees shall receive PPE training prior to conducting work that requires the use of PPE. The employees shall be trained in the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don (put on), doff (take off), adjust and wear PPE
- The limitation of the PPE
- The proper care, maintenance, useful life and disposal of the PPE

This training can be completed using a format best suited for the employees; however, it must include a hands-on-session of the PPE.

Refresher

Refresher training of individual employees shall occur when any of the following occur:

- Changes in the work site render the previous training obsolete
- Changes in the types of PPE to be used render the previous training obsolete
- Inadequacies in the employee's knowledge or use of assigned PPE indicate that the employee has not retained an understanding or skill of PPE use

Certification of Training

All employees receiving the PPE training outlined above shall certify their receipt and understanding of this training. The following information shall be documented with the certification:

- Name of each employee
- Date(s) of training
- Identification of the PPE subject

PERSONAL PROTECTIVE EQUIPMENT (PPE) SELECTION GUIDELINES

Whenever possible the Commission will use engineering, administrative, or procedural controls to ensure employees safety before the use of PPE. PPE shall be used in conjunction with engineering, administrative and procedural controls.

Personal Protective Equipment (PPE) includes all clothing and work accessories designed to protect employees from workplace hazards. Employee shall wear protective equipment as required and when instructed by a supervisor or another employee acting in a safety capacity.

Availability and Location

The Commission shall provide personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers. The personal protective equipment shall be used and maintained in a sanitary and reliable condition by each employee.

PPE including gloves, safety glasses, face shields, aprons, and other personal protective equipment is available from an employee's supervisor.

Proper Use

Proper use of personal protective equipment is essential to prevent many health hazards. Employees shall receive the necessary instruction as to what personal protective equipment must be worn. All personal protective equipment shall be maintained in good condition and inspected prior to use.

Disposal

Damaged and used personal protective equipment shall be disposed of according to the manufacturer's instructions.

HEAD PROTECTION

All hard hats shall be in compliance with or exceed ANSI Z89.1-1986. The criteria to be considered when purchasing hard hats shall include:

- Compatibility to welding hoods
- Compatibility with earmuffs, hearing protection, splash goggles, face shields, etc.
- Comfort for the wearer
- Ratchet suspension

Approved hard hats shall be worn in all general construction, service, designated hardhat areas and where there is an overhead hazard.

Bump caps are only permitted for use by mechanics conducting vehicle repair operations. Metallic hard hats are prohibited.

EYE/FACE PROTECTION

Safety glasses, goggles, and face shields shall meet or exceed ANSI standard Z87.1-1989. ANSI approval is distinguished on the frame and/or the lens by the Z87.1 marking.

Approved eye protection shall be worn in all general construction, service or otherwise designated eye protection areas.

Only those sunglasses approved by ANSI Z87.1 are permitted on work sites.

All safety glasses shall have permanently attached side-shields and polycarbonate lenses. Prescription glasses shall meet ANSI Standard Z87.1-1989 or ANSI approved glasses or goggles shall be used over non-ANSI approved prescription glasses.

Employees shall wear ANSI-approved safety glasses or goggles whenever using face shields and welding hoods.

HAND PROTECTION

Approved hand protection shall be worn in all general construction, service or otherwise designated hand protection areas. The appropriate form of hand protection shall be worn as determined by the PPE hazard assessment.

CLOTHING

Employees shall wear chemical protective clothing as determined by the PPE hazard assessment.

HEARING PROTECTION

When hearing protection is utilized or required, various types and styles of hearing protection shall be made available for employees' selection and use.

In the event that hearing protection is required, the protection chosen shall have the ability to reduce the employee noise exposure below 85 dBA. The Noise Reduction Rating (NRR) will indicate the amount of decibel reduction provided by the specific hearing protection equipment.

FOOT PROTECTION

Protective footwear shall be determined in accordance with the PPE hazard assessment.

All protective footwear shall meet the requirements and specifications of ANSI Z41-1991.

Protective footwear shall be provided to employees according the appropriate section of their union contact.

FALL PROTECTION

See the Fall Protection Directive in this manual.

RESPIRATORY PROTECTION

See the Respiratory Protection Directive in this manual.

Appendices:

- Appendix A – Occupational Footwear Hazard Assessment Form
- Appendix B – Safety Footwear Requirements by Job Classification
- Appendix C – Workplace Hazard Assessment Form
- Appendix D – Protective Footwear Program

Appendix A – Occupational Footwear Hazard Assessment Form



M-NCPPC OCCUPATIONAL FOOTWEAR HAZARD ASSESSMENT FORM

Instructions: Photo copy these forms and keep an original for future hazard assessments. Use a copy as a guide for your walk through survey. It will help you identify the hazards in each work area. Once you've completed the form, review the *Guidelines* for selecting *Personal Protective Footwear*.

Area: _____ **Job Classification:** _____

Assessor: _____ **Date:** _____

FOOT HAZARDS: Tasks that can cause foot hazards include: Carrying or handling materials that could be dropped, performing manual material handling, working with chemicals, working around sharp objects, and working near electrical hazards.

Check the appropriate box for each hazard:

Description of Hazards:

Impact..... Yes No
 Compression Yes No
 Puncture..... Yes No
 Slipping Hazards Yes No
 Electrical Hazards.. Yes No
 Instep Hazards Yes No
 Chemical Exposure.... Yes No
 Water Resistant/Proof. Yes No
 Other..... Yes No

Appendix B – Safety Footwear Requirements by Job Classification

POSITION	Steel Toe Shoe	Composite Toe Shoe	Steel Toe Boot (over ankle)	Steel Toe/ Composite Toe 8" (over ankle)	Composite Toe Boot (over ankle)	Compressive Forces	Puncture Resistant	Slip Resistant Tread	Deep Tread	Metatarsal Protection	Electrical Hazard Protection	Water Repellent	Water Proof	Chemical Resistant
Driver - Messenger	X	X	X		X	X		X				X		
Stock Clerk I	X	X	X		X	X		X				X		
Stock Clerk II	X	X	X		X	X		X				X		
Parks and Rec. Warehouse Attendant	X	X	X		X	X		X				X		
Carpenter			X		X	X	X	X	X		X	X		
Senior Carpenter			X		X	X	X	X	X		X	X		
Electrician			X		X	X		X	X		X	X		
Senior Electrician			X		X	X		X	X		X	X		
Locksmith			X		X	X		X			X	X		
Mason			X		X	X	X	X	X	X	X	X		X
Senior Mason			X		X	X	X	X	X	X	X	X		X
Painter			X		X	X		X	X		X	X		X
Senior Painter			X		X	X		X	X		X	X		X
Plumber			X		X	X		X	X	X	X		X	X
Senior Plumber			X		X	X		X	X	X	X		X	X
Welder			X		X	X		X	X	X	X	X		
Senior Welder			X		X	X		X	X	X	X	X		
Trades Trainee * (See Specific Trade)			X		X	X	*	X	X	*	*	X	*	*
HVACR Mechanic			X		X	X		X	X		X	X		X
Senior HVACR Mechanic			X		X	X		X	X		X	X		X
Mechanic			X		X	X		X	X			X		X
Senior Mechanic			X		X	X		X	X			X		X
Equipment Operator			X		X	X	X	X	X		X	X		
Heavy Equipment Operator I			X		X	X	X	X	X		X	X		
Heavy Equipment Operator II			X		X	X	X	X	X		X	X		
Park/General Maintenance Worker (Perm custodial)			X		X	X		X			X	X		X
Park/General Maintenance Worker (Part Time custodial)			X		X	X		X			X	X		X
Park/General Maintenance Worker I			X		X	X		X	X		X	X		
Park/General Maintenance Worker II			X		X	X		X	X		X	X		
Park/General Maintenance Worker III			X		X	X		X	X		X	X		
Park/General Maintenance Worker III- CDL			X		X	X		X	X		X	X		

Park/General Maintenance Worker III-PAC	X		X	X		X	X	X	X	X
Park/General Maintenance Worker III-CDL/PAC	X		X	X		X	X	X	X	X
Tree Climber/Maintenance Worker I		X		X		X	X	X	X	X
Tree Climber/Maintenance Worker II		X		X		X	X	X	X	X
Landfill Operator	X		X	X	X	X	X	X	X	
Gardener I	X		X	X		X	X	X	X	X
Gardener II	X		X	X		X	X	X	X	X

NOTE: All foot protection must meet the requirements as specified in 29 CFR 1910.321, 1910.136 and 1910.266, as well as the American National Standards Institute (ANSI Z41.1 - 1999)
If additional foot hazards are identified other than those noted in the chart above, the Supervisor/Manager should complete a new Hazard Assessment and the correlating foot protection used.

Appendix C – Workplace Hazard Assessment Form

M-NCPPC -Workplace Hazard Assessment Form

Instructions: Use this form to help identify the Personal Protective Equipment required within each work location. Multiple forms may be used, as needed, to include all work areas or job functions within each Department. Use attached instructional sheet to complete the form. **If no apparent hazards exist, check "Other" and write "none".**

Department:	Job Function/Activities:
Division/Shop:	
Work Location(s):	

1. Hazards Present (Check all that apply) (Check "Other" and write "none" if no apparent hazards exist)	2. Describe Hazards (e.g., work with glass, arcs from welding, work on steam lines, etc.)	Personal Protective Equipment to Consider (complete appropriate boxes with the specific PPE required e.g., splash goggles, face shields, nitrile gloves, hard hat, footwear, etc.)				
		Eye	Hand	Head	Clothing	Foot
<input type="checkbox"/> Impact						
<input type="checkbox"/> Cuts/Penetration						
<input type="checkbox"/> Electrical						
<input type="checkbox"/> Thermal (Hot/Cold)						
<input type="checkbox"/> Light (optical) Radiation						
<input type="checkbox"/> Chemical						
<input type="checkbox"/> Biological						

<input type="checkbox"/> Harmful Dust						
<input type="checkbox"/> Pinch/Crush/Roll Over						
<input type="checkbox"/> Other						

Assessment completed by: _____ **Title:** _____ **Phone:** _____

Facility _____ **Signature:** _____ **Date:** _____

Return completed forms to Risk Management & Safety, EOB

Appendix D – Protective Footwear Program

Commission employees in the following classifications shall wear an ANSI Z41-1999 approved boot made of sturdy leather with a safety toe. The boot shall also meet other specified criteria as outlined in the employee's classification specific PPE assessments.

Protective footwear shall be worn by all Commission employees involved in the following:

- Trade Shop Supervisors
- Plumbers
- Mechanics
- Welders
- Carpenters
- Masons
- Heavy Equipment Operators
- Tree Maintenance Crew
- Park Maintenance Crew
- Green House/ Nursery Technicians/Gardeners
- All construction Personnel
- All other occupations where there is a possibility of impact from falling objects (50 lbs or greater), where puncture hazards exist, or as specified in the position description.

Volunteers performing the same work and exposed to the same conditions, as Commission employees shall wear the same protective footwear.

The Commission provides a Protective Footwear benefit for all Merit System/career employees and through this benefit employees are eligible to receive one voucher per year. The amount of allowance shall be established by the Executive Director at the beginning of each year or as outlined in the applicable collective bargaining contract for employees who are: (1) required by their position to wear safety footwear, (2) have at least six months of service, (3) are off probation, and (4) with the Commission's and their supervisor's approval.

The Commission will provide through their vendor(s), top quality PROTECTIVE FOOTWEAR, which meet and exceed the OSHA specifications as outlined in ANSI Standard Z41-1999.

The protective footwear contract has been awarded to a qualified vendor. The vendor has agreed to service our facilities by shoe mobile(s) and store location(s) in the area.

Optional selections that meet the outlined criteria may also be available to employees at an additional cost depending on the protective footwear selected. These additional selections are available to accommodate employees who have difficulty in selecting protective footwear from the no cost selection offered.

SECTION 5.25

Pesticide Safety and Integrated Pest Management

The M-NCPPC has implemented this Directive to ensure the safety of employees and users of our parks and to protect the environment by proper handling, storage, and application of pesticides and through use of Integrated Pest Management (IPM) strategies to manage pests.

The Commission's program will comply with all relevant federal, state and county regulations.

PURPOSE

The purpose of this Directive is to provide guidance and instructions for the implementation of integrated pest management programs; the use, storage and handling of pesticides; training and licensing requirements for pesticide applicators; and protocols for notification, record-keeping and reporting pesticide use.

APPLICABILITY

This Procedure applies to all M-NCPPC employees that are required to handle pesticides within Commission properties.

DEFINITION OF INTEGRATED PEST MANAGEMENT (IPM)

Integrated pest management is a scientific, biology-based program that combines strategies for long-term suppression or prevention of plant pest problems with minimal impact on human health, the environment and nontarget organisms.

Four key components of IPM:

1. Mechanical or physical control to remove or block the pest
2. Cultural control to select and support healthy plants
3. Biological control to enhance balance between pests and predators
4. Chemical control when other strategies fail

IPM Requirements--used alone or in combination--include:

- Prevent pest problems by selecting pest-resistant species and cultivars.
- Reduce and exclude pests through good sanitation. Modify pest habitat sites used for breeding, overwintering, and transport.
- Minimize plant stress by installing 'right plant, right place' and provide suitable soil conditions, moisture and nutrient availability.

- Monitor plant health for early detection of pests.
- Maintain scouting records with calendars and maps of pest outbreaks.
- Assess pest population levels to determine damage potential, life stage present, number of generations per season and treatment thresholds.
- Identify, conserve, and protect biological control organisms. Release biological control organisms to help reduce pest populations where feasible.
- Treat pest problem when population threshold is reached.
- Optimize timing of control measures based on season, pest life cycle, and environmental conditions
- Select pesticides (organic or conventional) with low human risk that:
 - are short-lived in the environment
 - are proven to effectively control the specific pest or pathogen
 - pose little threat to natural enemies and non-target species
 - are rotated with pesticides of different resistance classes
- Choose equipment, nozzle and application techniques to optimize control, reduce pesticide quantity and minimize drift to prevent off-target effects.
- Review and evaluate treatment efficacy; modify and/or repeat as needed.

PESTICIDE STORAGE AND INVENTORY

[State law](#) requirements:

- Pesticides shall be stored in a separate building or separated by a physical barrier from living and working areas and from food, feed, fertilizer, seed, and safety equipment.
- The storage area shall be secured or locked.
- A warning sign approved (and provided) by the Maryland Department of Agriculture shall be placed on the exterior of the storage area.
- Pesticides shall be stored in a dry, ventilated area.
- The pesticide storage area shall be kept clean.
- Absorbent material sufficient to absorb a spill equivalent to the capacity of the largest container in storage shall be kept in the storage area.
- The storage area shall have an appropriate fire extinguisher available.

Additional information on the storage of pesticides can be obtained from MDA Pesticide Information Sheet No. 11, "Storage and Transport"

Responsibility for inspecting and maintaining the inventory and pesticide storage area shall be assigned to one person per site and shall be listed as a significant task function of his/her evaluation.

Storage Containers

All pesticides shall be kept in their original containers. If the original container is damaged or leaking, transfer contents to an empty container of the same product or to another clean container (service container) and label it with the trade name,

percent of active ingredient, signal word, EPA Registration number and date. All pesticide containers should have the date of purchase written on them with an indelible marker. Rotate supply, using oldest containers first.

Pesticide Inventory Records

The pesticide inventory for each storage location should include type (Insecticide, Fungicide, Herbicide, Other), trade name, active ingredient(s), EPA number, form (liquid or dry), quantity and unit of measure. Pesticides used immediately upon purchase should also be included on the inventory list. Pesticide inventory is maintained in three locations: 1) in the pesticide storage area; 2) on file at the facility and 3) in a central excel spreadsheet file stored on a shared drive (Montgomery Parks). Hazardous Materials Inventory is also maintained for some sites that require annual reporting for HazMat.

PURCHASE AND DISPOSAL OF PESTICIDE CONCENTRATES & CONTAINERS

Purchasing Pesticides

Refer to Bid # B36-120 Agricultural and Grounds Keeping Services for suppliers and best prices for purchasing pesticides, fertilizers and seed. Pesticides must be registered for use in Maryland and purchasing from local suppliers will assure that the product is approved in our state. The [State Chemist](#) manages registration of pesticides and maintains a list of products approved for use in Maryland.

For each new pesticide purchased, obtain a copy of the Safety Data Sheet for your site's SDS binder. Also, make a copy of the pesticide label for your files since it is more convenient to read and review label details indoors prior to mixing and measuring for an application.

Disposal of Pesticide Concentrates & Containers

Pesticides may become useless because of age, freeze damage, container deterioration, or if revoked by the Environmental Protection Agency or State regulation.

- The Division requiring hazardous materials disposal will bear the cost and must retain all paperwork involved.
- Disposal of unusable pesticide concentrates is available once a month for a nominal cost (depending on material). Montgomery County facilities can find information regarding location, drop off days and cost at [ECOWISE](#) <https://www.montgomerycountymd.gov/sws/ecowise/> Montgomery County staff should submit ECOWISE recycling receipts to the Sustainability Coordinator in Montgomery Parks. Prince Georges County facilities can

- find information regarding location, drop off days and cost at ECOWISE <https://www.princegeorgescountymd.gov/sws/ecowise/>
- Recycle empty pesticide containers at approved locations. Dates for pesticide container recycling can be found on the [MDA website](#).
 - Containers must be triple rinsed and punctured before recycling.
 - Pesticide containers cannot be recycled with regular recycling.
 - Green Farm, 8301 Turkey Thicket Dr, Gaithersburg, MD 20879 is one location for pesticide container recycling.

TRAINING, REGISTRATION & CERTIFICATION OF PESTICIDE USERS

Training

The Pest Management Coordinator for each county shall coordinate and/or provide training for employees who need to acquire the credentials of State “Registered Pesticide Employee.” Training content must include information on: (a) Pesticide laws and regulations; (b) Label comprehension; (c) Safety and emergency procedures; (d) Proper pesticide handling and storage; (e) Pest identification and control recommendations; (f) Pesticide application techniques; (g) Environmental and health concerns; and (h) Integrated pest management principles.

State Registration

An employee must successfully complete the training program containing content required by [Maryland law](#) and be registered with the State before he or she may apply pesticides for the M-NCPPC. Registered employees work under the supervision / direction of a certified pesticide applicator and must carry a state-issued photo identification card (a picture of the MDA pesticide ID card on your phone is acceptable) when applying pesticides.

<http://mdrules.elaws.us/comar/15.05.01.04>

State Certification

“Certification” is the Maryland Department of Agriculture’s trained, examined and licensed status for pesticide users. State Pesticide Applicator Certification is required by some M-NCPPC Job Specifications.

To take the certification exam, the state requires that an individual has one year of experience as a registered applicator in each category of pest control for which they want to become certified OR a combination of experience and education in pests or pest management OR approved degree/classroom training. Upon successful completion of the exam, Maryland Department of Agriculture will issue a public agency pesticide applicator certificate. Forms for initial certification (not-for-hire) as a pesticide applicator are found on the [MDA website](#).

Certified Applicators must:

- Re-certify each year by completing State-approved training programs to acquire recertification credits required for their categories. Course options and dates are listed on the [MDA website](#).
- Comply with all Federal, State and County regulations, pesticide label directions and the requirements of this Directive.

RECORD KEEPING

The following records must be kept on file at the site for each unit applying pesticides:

- Pesticide Inventory
- Safety Data Sheets (SDS)
Maintain SDS binder in a conspicuous place at the work site
- Pesticide application records
The pesticide applicator must complete a Pesticide Application Record form and keep the original paper or electronic record on file for 2 years. The following information (at minimum) shall be recorded at the time of application:

Applicator name, date, time of day, pest targeted, product name, EPA number, concentration or rate used, size of area if label application rate is per acre or per sq. ft., quantity of concentrate used, gallons of water, equipment used, treatment location, direction and velocity of the wind.

In Montgomery County, pesticide application data is entered into EAM for electronic record-keeping and for generating pesticide use reports.

- Current pesticide applicators' certificates for each certified pesticide applicator employee. [Download and print the certificates](#) and public agency license certificate and post them in a conspicuous place. The individual assigned to the public agency business site license shall submit on-line renewals for all staff under his or her site license number using a special code supplied by MDA for the specific public agency site number. <https://www.egov.maryland.gov/MDA/Pesticides/LicenseRenewal>
Certified applicator renewals are submitted on the [Maryland Department of Agriculture](#) website by June 30th every year.
- State Notification List of Pesticide Sensitive Individual

NOTIFICATION OF PESTICIDE APPLICATIONS

Informing Pesticide Sensitive Individuals

Maryland's regulations require all businesses and public agencies licensed or permitted by the Maryland Department of Agriculture to notify registered pesticide sensitive individuals prior to pesticide applications made to properties adjacent or contiguous to their residences.

Telephone contact the day before the scheduled pesticide application is encouraged however, notification the morning of the planned pesticide application by means of telephone, in person, or written notice delivered to the listed individual is acceptable.

If the person cannot be contacted prior to the application, a written notice is required at the individual's residence that provides the date and location of the pesticide application.

If the pesticide application was not performed for any reason and is rescheduled, you are required to re-notify the individual prior to the pesticide application.

An updated list of Pesticide Sensitive Individuals is mailed annually to the M-NCPPC pesticide public agency permit holders in each maintenance area.

School Fields and Grounds Applications

Montgomery County Public Schools. If planning to apply pesticides on school property, contact the pest management supervisor, Environmental Services, Division of Maintenance at 240-740-2330 or joseph_l_likambi@mcpsmd.org seven days prior to application. Pesticide or herbicide application on school property is regulated by Maryland Department of Agriculture (MDA) which requires proper notification be sent to the schools prior to the application of the herbicide or pesticide. The pesticide must be a chemical on the school IPM pre-approved list maintained by the Montgomery County Schools' Safety Coordinator. Also, if a proposed pesticide or herbicide meets the requirements of MCPS and MDA, the contractor will be notified if use is approved. Permittee applying a pesticide to a school ground shall post signs at the time of application that remain in place for 48 hours. Submit records of application/notification, including company and applicator license information to be kept in a school IPM Log book.

Prince George's County Public Schools. The PGCPSS IPM program is managed through their [Environmental Office](https://www.pgcpss.org/environment/) <https://www.pgcpss.org/environment/> contact person for Prince Georges County Schools can be reached at (301)952-6555. Alex.baylor@pgcpss.org

Prince George's County Community Centers, Playgrounds and Pools

Provide advance notice of pesticide applications in these sites by contacting the Facility Director via email and phone call.

Montgomery County Playgrounds and Certain Designated Pesticide-free Parks

No conventional pesticides are applied in designated pesticide-free parks and playgrounds unless insects (e.g. wasps), weeds (poisonous or noxious plant) or

other pests poses a health hazard to people. Organic and listed products are permitted in PFP and playgrounds. Approved products and ingredients can be found at <https://www.epa.gov/minimum-risk-pesticides> or <https://www.ams.usda.gov/rules-regulations/organic/national-list>

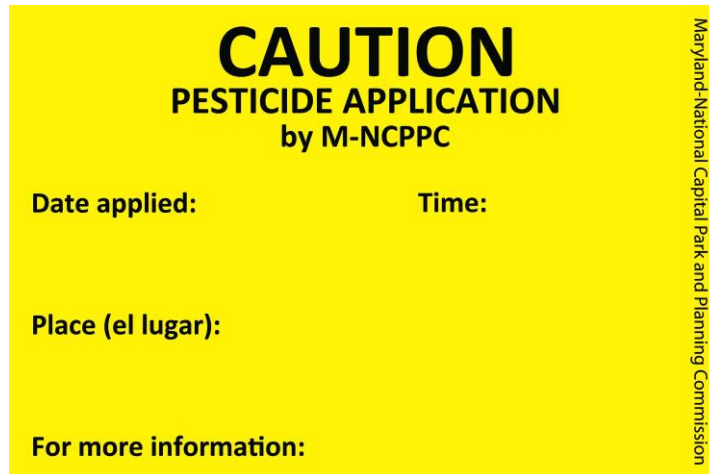
Montgomery County Athletic Fields, Managed Turf and Within 25’ of a Stream, Creek or River

Advance notice of 48-hours is required for pesticide applications on athletic fields, managed turf and within 25’ of a stream, creek or river. Submit details of the planned application via email to Montgomery Park’s website staff the week prior to application; and post white Notice of Planned Application signs at the site 48 hours prior to beginning the pesticide application. Montgomery County regulation COMCOR [33B.00.01](#) Pesticides

Signs for Pesticide Applications



Signage at time of application is required under Maryland state law for all turf & ornamental applications (Category 3A and 3C); the MDA-approved yellow, 4-inch x 5-inch pesticide application signs remain in place for 48 hours following application. The type shall be rigid as opposed to a flag. Signs must be posted in a conspicuous place at each primary access to the treated area and where passersby or persons entering the treated area can read them. Permittee applying a pesticide to a school ground shall post signs at the time of application. For athletic fields and golf courses, larger signs can be used and must be posted at eye level in a conspicuous place at least at the primary points of access to the field or golf course.



Contact Information on pesticide application signs includes a telephone number where more information on the pesticide application can be obtained. A copy of the pesticide label, and/or the Poison Control telephone number (800-222-1222) must be supplied to any citizen upon request.

Agricultural Areas

M-NCPPC agricultural areas include production greenhouses, nurseries, and farms. Agricultural areas shall comply with notifications and application protocols specified in the federal [Worker Protection Standards](#).

Pesticide safety information must be displayed in a central location at agricultural use sites where it can be readily seen and read by workers.

Safety information required by the federal Worker Protection Standards includes:

- Pesticide safety poster <http://pesticideresources.org/wps/cp.html>
- Emergency medical care information including the name, address, and telephone number of the nearest emergency medical care facility (can be on the safety poster or displayed close to the safety poster)
- Pesticide application details shall be displayed for at least 30 days after the end of the restricted-entry interval. Including:
 - Location and description of the treated area
 - Time and date the pesticide was applied
 - Product name, EPA number, and active ingredient(s)
 - The restricted-entry interval for the pesticide

DANGER
PESTICIDES

Re-entry:

Date:

Time:

Product:

PELIGRO
PESTICIDAS



KEEP OUT
NO ENTRE

DANGER PELIGRO
PESTICIDES PESTICIDAS



KEEP OUT
NO ENTRE

THIS PROPERTY TREATED WITH

on _____
and all persons are warned to stay out
until _____

Signs for agricultural pesticide applications are standard at 14 inches by 16 inches with letters at least 1 inch in height however, nurseries and greenhouses may use a smaller sign.

In greenhouses and nurseries, post signs so they are visible from all usual points of entry to the treated area including each road, aisle or other route that enters the treated area. Posting requirements can differ significantly depending on the type of treatment (soil drench, bark or foliar spray), containers treated and pressure so it is helpful to review posting variances in Tables 1 & 2 of 40CFR §170.110 **Restrictions associated with pesticide applications** on the [WPS website](#). Post signs no sooner than 24 hours before the scheduled application of the pesticide. Signs remain posted throughout the application and agricultural use restricted-entry interval specified on the product label.

Golf Courses

- Signs notifying of a pesticide application must be posted in a conspicuous place at least at the primary points of access to the golf course, such as the first and tenth tees. The sign must be posted at eye level, be no less than 2' by 3', and be made of durable, weatherproof material. The words "Caution-Pesticide Application," date of application and sites of pesticide application (fairways, greens, tees) must be printed on the sign. This information should remain on the site for 48 hours. Additional bulletins may be posted in the clubhouse or a contact for further information can be printed on the sign.
- Areas treated with pesticide must be kept closed to golfers until the re-entry time on the label has expired.

PROCEDURES FOR APPLYING PESTICIDES

Protective clothing

The minimum protective clothing required for any pesticide application is long sleeves, long pants, shoes and socks.

- Additional Personal Protective Equipment (PPE) required by the pesticide label must be available to pesticide applicators and stored in a location separate from pesticides. PPE may include: goggles, disposable Tyvek suits, neoprene/nitrile gloves, boots, respirator, face shield or other safety equipment specified on the label.
- Respirators, if required for use, must be fit-tested according to M-NCPPC Section 5.29 Respiratory Protection of the Risk Management and Safety Manual. Staff must be trained in proper use and maintenance of his/her respirator.
- Each employee applying pesticides must have his/her own pesticide safety gear assigned to him/her by the Commission.

Mixing Pesticides

- Prior to mixing, review the label carefully and begin completing the required Pesticide Application Record form with information such as product name, EPA number, active ingredient, date, concentration/rate, quantity, etc.
- Wear personal protective equipment specified on the product label for mixing. Mixing and measuring PPE may include more than the application PPE since mixing concentrates presents different hazards—for example, the label may recommend an apron, face shield or other PPE.
- Examine spray equipment prior to use for any problems.
- Partially fill tank with water and spray out a small quantity to check for leaks, drips and nozzle output.
- Spray equipment used for herbicides must be marked HERBICIDE ONLY.
- Mix pesticides at the designated site near the storage facility. Mix and fill tanks over an impervious surface so spills can be contained quickly.
- Maintain an air break between the end of the hose and tank solution. NEVER leave the hose unattended or let the hose dip into the tank solution.
- Mix only the quantity to perform the job. Avoid leaving any mixed products in sprayers. If any product is left in a sprayer, it MUST be labeled with Product name, Concentration, Date, and Your Name.
- Triple rinse all measuring cups and empty pesticide containers. Use this rinseate as part of your tank solution.
- Triple rinse your sprayer when finished. This rinseate must be sprayed out on labeled plants/areas however, do not use it on the treated plants.
- Spill kit shall be located near-by.
- Anti-siphon device shall be installed on the water source.
- Empty containers should be punctured and stored in a designated location in or near the pesticide storage area for pesticide container recycling.

Transporting & Applying Pesticides

- Vehicles used for transporting pesticides shall have the public agency license number [MDA-site license number] in 2” letters and numbers on both sides.
- A copy of the pesticide label shall be near-by during applications.
- When transporting pesticides in small sprayers, secure to prevent from tipping.
- When transporting concentrates, place in a locked container.
- Carry fresh water for applicator washing if spraying off-site.
- Observe all environmental cautions on label.
- Measure or estimate wind speed and direction at the site of application and record this on the Pesticide Application Record form.
- No spraying shall be done when wind may cause the chemical to drift from the target area.

Cleanup

Applicators are responsible for cleaning spray equipment, measuring cups, and maintaining cleanliness of storage and mixing areas. Wash and properly store any reusable safety gear such as boots, respirator or gloves.

Pesticide Application Records

A Pesticide Application Record form must be completely filled out at the time of application. The following information (at minimum) shall be recorded:

Applicator name, date, pest targeted, product name, EPA number, concentration or rate used, size of area if label application rate is per acre or per sq. ft., quantity of concentrate used, gallons of water, equipment used, time of day, treatment location, direction and velocity of the wind.

Records must be kept on file for 2 years.

In Montgomery County, pesticide application record data is also entered into EAM for electronic record-keeping and for generating pesticide use reports.

AQUATIC WEED CONTROL SITES (Category 5)

In addition to normal safety precautions required for pesticide applications in parks, the following extra steps must be taken when applying aquatic herbicides:

- All aquatic pesticide applications must be performed by or under the supervision of a state Certified Applicator with certification in aquatic weed control category 5.
- A toxic materials permit is needed to control nuisance aquatic plants or animals in state waters (includes streams, storm water ponds, wetlands and tidewater). It takes approximately 30 days to get a permit which is then good for up to 5 years.
- Complete the fillable permit form MDE/WSA/PER.015 or pdf copy
- Submit the permit application via email or mail 30 days prior to the proposed toxic materials use. This application is co-reviewed by Maryland

Department of the Environment (MDE) and Maryland Department of Natural Resources (DNR).

LEASED LAND

The Tenant shall comply with all applicable Legal Requirements governing pest control including, but not limited to, storage, inventory, purchase, disposal, application and record-keeping. The Tenant shall not use, or cause to use, any pest control material that is prohibited by any Legal Requirements.

Public use of bordering parklands takes priority over agricultural land use (e.g. pesticide/herbicide application).

CONTRACTOR-APPLIED PESTICIDES

Contractors shall perform all herbicide applications as specified in the Maryland Department of Agriculture's Regulations Pertaining to Pesticide Application (COMAR 15.05.01), SHA's Integrated Vegetation Management Manual for Maryland Highways and, for aquatic treatments, in compliance with regulations of the Maryland Department of the Environment (MDE) and Maryland Department of Natural Resources (DNR).

Products shall be used in conformance with the manufacturer's recommendations as shown on the product label.

All applicators must be certified or registered with the Maryland Department of Agriculture as a pesticide applicator and follow all applicable federal, state and local regulations.

Notification and posting are required for pesticide treated areas to comply with Federal, State, County and local laws, ordinances and regulations. You must pre-notify M-NCPPC at least 72 hours prior to any pesticide application. Pre-notification of pesticide sensitive individuals is required under state regulations. Pesticide applications within 25 feet of a stream, creek or river on Montgomery County Parkland require 48-hour website and site pre-notification using special signs required under Montgomery County law. The special pre-notification signs and website posting are both provided by your M-NCPPC Montgomery Parks staff contact.

EMERGENCIES & SPILLS

Accidental Exposures

- If an applicator has skin contact with a pesticide, immediately cease spraying and thoroughly shower/wash exposed area with cool water.
- If eye is exposed, flush with fresh water for 15 minutes.

- Watch for symptoms of pesticide poisoning. These may include fatigue, headache, mental confusion, rash, nausea, diarrhea, vomiting, sweating, chest pain, trembling, dilated pupils, mucous secretions or convulsions.
- Be familiar with first aid procedures on the label; procedures differ depending on the chemical.
- If a person shows toxic symptoms, call 911 for trained emergency assistance; report the symptoms and the chemical(s) involved. Have the label and Safety Data Sheet on hand, and follow the instructions given. Inform the appropriate supervisor.
- Immediately report any bodily contact with a pesticide to a supervisor. Any pesticide contact that requires action more than washing up, or any contact with a pesticide concentrate must be reported to the M-NCPPC Risk Management & Safety Office (301-454-1681 or 301-454-1682 or 301-454-1699).
- Applicators must promptly report any malfunction or defects in equipment to their supervisor.
- For non-emergency information, the Poison Control telephone number (800-222-1222) should be prominently posted in the facility office, the pesticide storage building, on spray equipment, and in roving crew's trucks.
- CHEMTREC (advice on major spills) 800-424-9300
<https://www.chemtrec.com/>
- Poison Control 800-222-1222
- Major spills must be reported to M-NCPPC [Risk Management](#) & Safety Office (301-454-1681 or 301-454-1682 or 301-454-1699).
- Spill Response Procedure with Incident Reporting can be found on [inSite MNCPPC](#)

SECTION 5.26 Playgrounds

The Commission has implemented this Directive for Playground Equipment and complies with the “Standard Consumer Safety Performance Specification for Playground Equipment for Public Use,” American Society for Testing and Materials (ASTM) F1487-01: Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment; (ASTM) F1292, U. S. Consumer Product Safety Commission (CPSC) Guidelines published in the Handbook for Public Playground Safety and all equipment manufacturers guidelines.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the care, installation, maintenance, and inspection of playground equipment.

APPLICABILITY

The Directive applies to all Commission employee’s assigned to inspect and maintain and repair playground equipment.

Those who design, purchase and install playground equipment should reference the “Standard Consumer Safety Performance Specification for Playground Equipment for Public Use”, ASTM F1487-01, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment; (ASTM) F1292: U. S. Consumer Product Safety Commission (CPSC) Guidelines published in the Handbook for Public Playground Safety; Americans with Disabilities Act and all equipment manufacturers guidelines.

These guidelines do not apply to fitness trail exercise equipment intended for adult use, provided that these are not located on or adjacent to a children’s playground. Equipment components intended solely for the disabled and modified to accommodate such users are also not covered by these guidelines.

DEFINITIONS

ASTM - American Society for Testing and Materials, which provides standards for Standard Consumer Safety Performance Specification for Playground Equipment for Public Use and Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.

CPSC - Consumer Product Safety Commission, which provides information in the form of guidelines for Public Playground Safety.

CPSI - Certified Playground Safety Inspectors.

NPSI - National Playground Safety Institute.

Composite Structure -Two or more play structures, attached or directly adjacent, to create one integral unit that provides more than one play activity (e.g., combination climber, slide, and horizontal ladder).

Critical Height - The fall height below, which a life threatening head injury would not be, expected to occur.

Designed Use - The intended use of a specific area, equipment, or object.

Design Scale - the proportions or dimensions a piece of equipment, object, area, or structure is designed to in order to facilitate a person of given dimensions to use with ease.

Designated Play Surface - Any elevated surface for standing, walking, sitting or climbing, or a flat surface greater than 2 inches wide having an angle less than 30° from horizontal.

Embankment Slide - A slide that follows the contour of the ground and at no point is the bottom of the chute greater than 12 inches above the surrounding ground.

Entrapment - Any condition that impedes withdrawal of a body or body part that has penetrated an opening.

Exposed Part - A part that may be subjected to the elements and to human touch.

Fixed Equipment - That which has a fixed position with no moving parts.

Footing - A means for anchoring playground equipment to the ground.

Grade Level - The finished surface or ground level around buildings, play equipment, or other man-made or natural objects.

Guardrail - An enclosing device around an elevated platform that is intended to prevent inadvertent falls.

Infill - Material(s) used in a protective barrier to prevent a user from passing through the barrier e.g., vertical bars, lattice, solid panel, etc.

Inspection - to carefully view or examine an area and/or piece of equipment.

Installation - The act of placing a piece of equipment or object in a given location.

Layout - An arrangement or plan of objects or areas.

Loose-Fill Surfacing Material - A material used for protective surfacing in the use zone that consists of loose particles such as sand, gravel, wood fibers, or shredded rubber.

Maintenance - To keep an area or equipment operating in a safe and pleasing condition at all times.

Manufacturer - The maker or producer of equipment or objects by hand or machinery.

Non-Rigid Component - A component of playground equipment that significantly moves or deflects during the normal use of the equipment.

Preschool-Age Children - Children 2 years of age through 5 years of age.

Protective Barrier - An enclosing device around an elevated platform that is intended to prevent both inadvertent and deliberate attempts to pass through the barrier.

Protective Surfacing - Surfacing material in the use zone that conforms to the recommendations.

Roller Slide - A slide that has a chute consisting of a series of individual rollers over which the user travels.

Rotating Equipment - That which has a fixed position but which rotates or turns around a center point.

Safe Equipment - A piece of equipment, object or area, which is relatively free from harmful or injurious parts, or objects, which may be fixed or moveable.

School-Age Children - Children 5 years of age through 12 years of age.

Slide Chute - The inclined sliding surface of a slide.

Sliding Equipment - That which has a fixed position but which has a portion or part used for sliding.

Stationary Play Equipment - Any play structure, which does not move or does not have components that move during its intended use.

Sub grade - The local material (soil) on which a complete surface material is placed.

Subsurface - The surface being under the grade level or finished surface.

Surface - Area under and around playground equipment.

Supporting Member - Load-bearing member of a structure.

Swinging Equipment - That which has a fixed position but which has swinging parts.

Tot Swing - A swing generally appropriate for children under 4 years of age that provides support on all sides of the occupant.

Traffic Pattern - The consistent flow of traffic, running or walking through a given area.

Tube Slide - A slide in which the chute consists of a totally enclosed tube or tunnel.

Unitary Surfacing Material - A manufactured material used for protective surfacing in the use zone that may be rubber tiles, mats or a combination of rubber-like materials held in place by a binder that may be poured in place at the playground site and cures to form a unitary shock-absorbing surface.

Upper Body Equipment - Equipment designed to support a child by the hands only (e.g., horizontal ladder, overhead swinging rings).

Use Zone - The surface under and around a piece of equipment onto which a child falling from or exiting from the equipment would be expected to land.

Vandalism - Deliberately mischievous or malicious destruction or damage of property.

REQUIREMENTS

General Inspections of Playground Equipment

Commission employees conducting playground inspections shall be Certified Playground Safety Inspectors (CPSI) through the National Playground Safety Institute (NPSI).

Maintenance inspections should be made at the beginning of play season and periodically during the season to maintain safe, healthful and attractive apparatus.

The frequency of thorough maintenance inspections will depend on the type of equipment, amount of use, and the climate.

Employee, volunteer and or/patron notification of damaged, worn or deteriorated equipment should be acted upon immediately.

INSTALLATION AND MAINTENANCE OF EQUIPMENT

Assembly and Installation

Proper assembly and installation of playground equipment are crucial for structural integrity, stability, and overall safety. The manufacturer's instructions shall be followed for the assembly and installation of playground equipment.

The playground equipment shall be thoroughly inspected by a qualified person after being assembled and prior to its first use.

The Park Manager responsible for the facility where the playground equipment is installed shall keep the manufacturer's assembly and installation instructions, and all other materials concerning the equipment in a permanent file.

Stability

Always install playground equipment according to the manufacturer's instructions and specifications to ensure that the equipment is able to withstand the maximum anticipated forces generated by active use which might cause it to overturn, tip, slide, or move in any way.

Secure anchoring is a key factor to stable installation, and because the required footing sizes and depths may vary according to equipment type, the anchoring process shall be completed in strict accordance with the manufacturer's specifications.

Maintenance and Inspections

The manufacturer's maintenance instructions and recommended inspection schedules shall be strictly followed to ensure the safety of the playground equipment. Proper maintenance and inspection of the playground equipment will ensure its safety and suitability for use.

A maintenance schedule for each piece of playground equipment shall be developed based on the manufacturer's recommendations.

The Commission shall develop a comprehensive maintenance program for each playground. All equipment shall be inspected frequently for any potential hazards, for corrosion or deterioration from rot, insects, or weathering.

The inspection shall also include frequent checks for broken glass or other dangerous debris.

Loose-fill surfacing materials should be inspected to ensure that the materials have not become displaced or compacted in high traffic areas such as under swings and at slide exits.

All damage, defects or hazards detected during inspections shall be repaired immediately and all repairs and replacement of equipment parts shall be completed in accordance with the manufacturer's instructions for repair and replacement of parts.

Inspection frequency will depend on the type of equipment, the amount of use, and the local climate. The inspections shall focus special attention on moving parts and other components that are subjected to excessive use and are expected to wear out.

CPSI shall conduct frequent inspections of playground equipment in a systematic manner.

Inspections can be conducted using checklists provided by the equipment manufacturer or one developed by the Commission for that particular piece of equipment. The use of the checklists helps to ensure that the inspections are in compliance with the manufacturer's specifications.

Certified and trained individuals use inspections to examine the playground on a frequent basis. Inspections alone do not constitute a comprehensive maintenance program.

In cases when the playground equipment cannot be repaired immediately the equipment should be taken out of service. This can be accomplished by enclosing the piece of equipment with safety fencing that is secured in the ground or by another means that cannot be easily displaced.

“Out of service” signs should be placed on the equipment until the repairs have been made.

The facility responsible for conducting the equipment inspection shall keep the records of all maintenance inspections, repairs made to equipment, manufacturer’s maintenance instructions and any inspections.

All inspections shall be documented and kept on file by the facility responsible for the inspection for one year after the life of the piece of equipment. When an inspection is performed, the person performing it should sign and date the form.

Accident and injury reports shall be retained to help identify potential hazards or dangerous design features that should be corrected.

Surfacing

The surface under and around playground equipment can be a major factor in determining the injury causing potential of a fall. A fall onto a shock-absorbing surface is less likely to cause a serious injury than a fall onto a hard surface.

Head impact injuries from a fall have the potential for being life threatening, the more shock absorbing a surface can be made, the greater is the likelihood of reducing severe injuries.

Determining Shock Absorbency of a Surfacing Material

No data is available to predict precisely the threshold tolerance of the human head to an impact injury.

However, biomedical researchers have established two methods that may be used to determine when such an injury may be life threatening.

One method holds that if the peak deceleration of the head during impact does not exceed 200 times the acceleration due to gravity (200 G’s), a life threatening head injury is not likely to occur.

The second method holds that both the deceleration of the head during impact and the time duration over which the head decelerates to a halt are significant in assessing head impact injury. This latter method uses a mathematical formula to derive a value known as Head Injury Criteria (HIC) [5]. Head impact injuries are not believed to be life threatening if the HIC does not exceed a value of 1,000.

The most widely used test method for evaluating the shock absorbing properties of a playground surfacing material is to drop an instrumented metal headform onto a sample of the material and record the acceleration/time pulse during the impact

Test methods are described in an ASTM Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment, ASTM F1292 [6].

Critical Height

Critical Height is used to describe the shock absorbing performance of a surfacing material. The Critical Height for a surfacing material is defined as the maximum height from which the instrumented metal headform, upon impact, yields both a peak deceleration of no more than 200 G’s and a HIC of no more

than 1,000 when tested in accordance with the procedure described in ASTM F1292. Therefore, the Critical Height of a surfacing material can be considered as an approximation of the fall height below which a life-threatening head injury would not be expected to occur.

The surfacing material used under and around a particular piece of playground equipment should have a Critical Height value of at least the height of the highest designated play surface on the equipment. This height is the fall height for the equipment.

Fall Heights for Equipment

Recommendations for the fall heights for various pieces of playground equipment are as follows:

- Climbers and Horizontal Ladders - The fall height is the maximum height of the structure.
- Elevated Platforms Including Slide Platforms - The fall height is the height of the platform.
- Merry-Go-Rounds - The fall height is the height above the ground of any part at the perimeter on which a child may sit or stand.
- See-Saws - The fall height is the maximum height attainable by any part of the see-saw.
- Spring Rockers - The fall height is the maximum height above the ground of the seat or designated play surface.
- Swings - Since children may fall from a swing seat at its maximum attainable angle (assumed to be 90° from the “at rest” position), the fall height of a swing structure is the height of the pivot point where the swing’s suspending elements connect to the supporting structure.

Equipment to Which Protective Surfacing Recommendations Do Not Apply

Equipment that requires a child to be standing or sitting at ground level during play is not expected to follow the recommendations for resilient surfacing. Examples of such equipment are sand boxes, activity walls, play houses or any other equipment that has no elevated designated playing surface.

Acceptability of Various Surfacing Materials

Hard surfacing materials, such as asphalt or concrete, are unsuitable for use under and around playground equipment of any height unless they are required as a base for a shock absorbing unitary material such as a rubber mat.

Earth surfaces such as soils and hard packed dirt are not recommended because they have poor shock absorbing properties. Similarly, grass and turf are not recommended because wear and environmental conditions can reduce their effectiveness in absorbing shock during a fall.

Acceptable playground surfacing materials are available in two basic types, unitary or loose-fill.

Unitary Materials — are generally rubber mats or a combination of rubber-like materials held in place by a binder that may be poured in place at the playground site and then cured to form a unitary shock-absorbing surface. Unitary materials are available from a number of different manufacturers, many of whom have a range of materials with differing shock absorbing properties.

Loose-Fill Materials — can also have acceptable shock absorbing properties when installed and maintained at a sufficient depth. These materials include, but are not limited to sand, gravel, shredded wood products and shredded tires. Loose-fill materials should not be installed over hard surfaces such as asphalt or concrete.

Loose-Fill materials – are generally sold for purposes other than playground surfacing, many vendors are unlikely to be able to provide information on the materials' shock absorbing performance.

Other Characteristics of Surfacing Materials

Selection of a surfacing material for a specific location may be governed by the environmental conditions at that location.

USE ZONES FOR EQUIPMENT

The use zone is an area under and around the equipment where protective surfacing is required. Other than the equipment itself, the use zone should be free of obstacles that children could run into or fall on top of and thus be injured.

MATERIALS OF MANUFACTURE AND CONSTRUCTION

Durability and Finish

Playground equipment should be manufactured and constructed only of materials that have a demonstrated record of durability in the playground or similar outdoor setting. Any new materials should be documented or tested accordingly for durability by the playground equipment manufacturer.

A major concern for playground equipment materials is corrosion or deterioration. Metals should be painted, galvanized, or otherwise treated to prevent rust.

All paints and other similar finishes must meet the current CPSC regulation for lead in paint (0.06% [600 ppm] maximum lead by dry weight).

The manufacturer should ensure that, as a result of contact with playground equipment, users cannot ingest, inhale, or absorb potentially hazardous amounts of preservative chemicals or other treatments applied to the equipment.

The Commission shall obtain documentation from the manufacturer that the preservatives or other treatments that have been used do not present a health hazard to users.

Pressure Treated Wood

Wood should be either naturally rot and insect-resistant (e.g., cedar or redwood) or should be treated to avoid such deterioration. Chromated copper arsenate (CCA), the chemical used to make "pressure" treated wood, has been used traditionally for this purpose. However, CCA will no longer be manufactured for use in and around playgrounds after December, 2003. Wood containing creosote, pentachlorophenol, and tributyl tin oxide are too toxic or irritating and should not be used in or around playgrounds.

Employees removing damaged or deteriorated wood that may contain CCA (pressure treated wood) shall wear the appropriate personal protective equipment.

Hardware

When installed and tightened in accordance with the manufacturer's instructions, all fasteners, connectors and covering devices should not loosen or be removable without the use of tools.

Bearings used in moving joints should be easy to lubricate or be self-lubricating.

All hooks, including S-hooks, should be closed.

A hook is considered closed if there is no gap or space greater than 0.04 inches. It is appropriate to measure this gap with a feeler gauge but, in the absence of such a gauge, the gap should not admit a dime.

Metal Surfaces

To avoid the risk of contact burn injury, bare or painted metal surfaces on platforms and slide beds should be avoided unless they can be located out of direct sun.

GENERAL HAZARDS

There are a variety of general hazards common to many types of playground equipment. The guidelines in this section apply to all elements of the playground.

Sharp Points, Corners, and Edges

There should be no sharp points, corners, or edges on any components of playground equipment that could cut or puncture children's skin. Frequent inspections are important to prevent injuries caused by sharp points, corners, or edges that could develop as a result of wear and tear on the equipment.

Exposed open ends of all tubing not resting on the ground or otherwise covered should be covered by caps or plugs that cannot be removed without the use of tools

Wood parts should be smooth and free from splinters. All corners, metal and wood, should be rounded. All metal edges should be rolled or have rounded capping and there should be no sharp edges on slides. Metal edges on the exit end and the sides along a slide bed can result in serious lacerations if protective measures are not taken.

Protrusions and Projections

Protrusions or projections on playground equipment should not be capable of entangling children's clothing, because such entanglement can cause death by strangulation.

Particular attention should be given to avoid protrusions or projections on slides to minimize the risk of entanglement with clothing. Jackets and sweatshirts with hoods and/or drawstrings have been involved in such entanglement/strangulation incidents. Jewelry, such as necklaces and rings, has also resulted in injuries from entanglement. The diameter of a protrusion should not increase in the direction away from the surrounding surface towards the exposed end.

Pinch, Crush, and Shearing Points

There should be no accessible pinch, crush, or shearing points on playground equipment that could injure children or catch their clothing. Such points can be caused by components moving relative to each other or to a fixed component when the equipment moves through its anticipated use cycle. To determine if there is a possible pinch, crush or shear point, consider the likelihood of entrapping a body part and the configuration and closing force of the components.

Entrapment

Head Entrapment: A component or a group of components should not form openings that could trap a child's head. A child's head may become entrapped if the child enters an opening either feet first or head first. Head entrapment by head-first entry generally occurs when children place their heads through an opening in one orientation, turn their heads to a different orientation, then are unable to withdraw from the opening. Head entrapment by feet first entry involves children who generally sit or lie down and slide their feet into an opening that is large enough.

Tripping Hazards

All anchoring devices for playground equipment, such as concrete footings or horizontal bars at the bottom of flexible climbers, should be installed below ground level, beneath the base of the protective surfacing material, to eliminate the hazard of tripping.

Low retaining walls are commonly used to help contain loose surfacing materials. In order to minimize trip hazards, retaining walls should be highly visible and any change of elevation should be obvious. The use of bright colors can contribute to increased visibility.

Suspended Hazards

Cables, wires, ropes, or similar flexible components suspended between play units or from the ground to a play unit within 45 degrees of a horizontal should not be located in areas of high traffic because they may cause injuries to a running child.

These suspended members should be either brightly colored or contrast with surrounding equipment to add to their visibility.

Playground Designer's Guidelines

Maximum height should be considered for any standards or walking surfaces that do not require perimeter protection in the form of guard rails or similar side restraints.

Assure that any access steps to any upper portions of equipment do not create additional hazards. Any such stairs or steps must be inherently hazard-free so that slipping from a step or getting otherwise injured is unlikely to occur. Consider high wear-resistant materials.

The spacing of equipment from buildings or other structures, sidewalks, curbing, or other hard surfaces should also be established to minimize the potential for injury as a result of a fall. The equipment should be spaced in such a way that a propelled body will not impact adjacent equipment. A safe operating zone should be utilized for each piece of equipment that would provide enough space between the equipment and its users and any other equipment and its respective users.

Hard play surfaces must be prohibited since any surfaces should be restricted to softer material such as wood chips, bluestones dust, sand, etc.

Material selection for pieces of equipment should be a factor when establishing safety design. It is suggested that the most durable material be selected with consideration given to softness where appropriate. This particularly takes form in the selection of swing seats, for example.

Any unnecessary projections (such as bolts, nails) should be eliminated from all pieces of equipment. Any required projections in any piece of equipment (such as steel climbing steps) should be designed so that all surfaces are rounded, padded or otherwise addressed to minimize any injury that might occur.

Assure that all pieces of equipment are securely anchored to prevent motion in any of the three (3) planes, and which would not be affected by freezing, normal weather conditions, or expected use of equipment.

If equipment is to be used by tots, the designer should be careful to limit access from play equipment to other equipment not designed for their use.

Components must be secured to one another so that removal or disassemble cannot be accomplished by hand or with common household tools.

The susceptibility to arson and malicious vandalism should be highly considered.

Playground Safety Maintenance Checklist

General Maintenance Guidelines

Maintenance checks should be made at the beginning of the play season and every week during the season to maintain safe, healthful and attractive apparatus. Citizen notification of damaged, worn or deteriorated equipment should be acted upon immediately.

1. Tighten any loose nuts, bolts, or clamps and apply new tape over protruding screws or bolts, if necessary.
2. Replace rusted parts, including swing chains.
3. Oil metal parts regularly.
4. Sand and repaint any rusted metal tubing with Unleaded paint.
5. All wooden equipment should be checked and sanded when splinters are found.
6. Refill landing pits.
7. Check wear around foundations to assure that they are covered by several inches of soil.
8. Repairs should be made immediately; broken equipment should not be used until it is fixed. Disassemble to prevent use until repaired.

Stationary Equipment

1. Monkey bars or nets should undergo regular inspection to make sure that bars do not turn and that nets are in good repair.
2. Surfacing underneath the apparatus should be kept resilient.
3. Low maintenance coating adds color, prevents corrosion, and insulates the steel from heat and cold.

Precast concrete with welded steel reinforcement: All surfaces are cast smooth against polished mold surfaces. Exposed surfaces are patched and patch material is hand rubbed smooth, and have rounded edges.

Moving Units

1. The fulcrum should be enclosed to protect against finger and hand injuries, and to prevent vandalism.
2. Frequent checks should be made that attachments at the fulcrum are secure.
3. Inspect for protruding nails or screws and for splintering or splitting of the boards.
4. Legs of units should be set in concrete approximately six inches below the play surface.
5. Inspection should assure that braces are firm and that steps are in good condition.
6. Metal slides should be erected in shady areas.

7. Beds and sides of the slide should be checked for protruding screws, nails, and rough spots.
8. At the front of the slide there should be a landing pit with sand, tan bark, or a comparable substance to cushion falls. The pit should be kept free of debris and kept resilient, level, and loose.
9. Inspect frames, hooks, hangers, connections, and suspensions weekly.
10. Tire swings, which are suspended from a universal joint, must be covered with a close-fitting rubber boot.
11. Ball and universal joints shall be equipped to receive heavy-duty grease lubrication.
12. Swings must have slash-proof seats, wrap-around swing hangers and nylon bearings, which provide friction-free operation without lubrication. They should revolve 360 degrees around the cross bar so they can't be wrapped around by vandals.

Equipment Literature

The literature for each play equipment descriptions shall contain the following information:

- The age group the equipment is designed for. The buyer should know the age group he/she is buying for. This will help him/her to buy the proper equipment.
- The use area required for each piece of equipment. This will help the buyer to know how much room is required for each piece of equipment so that he may judge the space needed and not overcrowd.
- Whenever the buyer must drill, ream, rivet, weld, sand, paint, or do any other work to complete installation of equipment this should be stated. Some buyers have bought equipment which does not state or stated, that no drilling, seaming, painting, etc., is necessary, only to find that they can not assemble the equipment without additional work. Some buyers are not equipped to do this, which could lead to a slipshod job.

General statements in the overall literature shall contain the following information:

1. Hard surfaces, such as concrete and asphalt, shall not be used under play equipment. Suggested materials should be mentioned, along with depth of and where to find them.
2. Define use area and explain the importance of making sure it is available.
3. Explain the importance for an ongoing maintenance program.
4. Proper installation and layout information.

Installation Specifications for Purchasing

Manufacturers should be required to place with each piece of equipment, in the form of written instructions, the following:

1. Instructions for assembly, which shall include a drawing showing at least a plan view, front view, and side view. The instructions are to be written so that the installer may readily understand them. Instructions are to accompany all unassembled equipment.

Rationale:

Proper assembly of equipment as per the design is essential to the user. Improper assembly or missing parts could mean collapse, breaking, coming undone, creating areas for a head, or foot to get caught in, or other accidents.

2. Assembly instructions shall include cautionary statements concerning the tightening, peening, or locking of all bolt caps and tubing end closures as required by this standard or practiced by the trade.

Rationale:

Proper installation means proper tightening, peening, locking, clinching, etc., which if done incorrectly could cause the failure of the equipment such as: rocking, undoing, etc., all of which could cause and accident.

3. A complete list of all parts, to include part name and order number.

Rationale:

Good maintenance means replacement of worn, vandalized, or missing parts immediately. Without a parts list, maintenance becomes timely; therefore leaving equipment unusable or usable with the possibility of an accident or more vandalism.

4. Statement to the buyer that "Any alterations, attachment (s), and/or method of attachment which will change the manufacturer's design shall not constitute an additional hazard to the user."

Rationale:

Changing the basic design of equipment by those who mean to do good, but who do not know the basic design criteria could mean the creation of equipment that is unsafe to use.

5. Statement to the buyer, "Concrete footer sizes are suggested only, therefore, local soil conditions must be considered for safe use of equipment. The tops of concrete footers shall be between 4-6 inches below the subsurface."

Rationale:

In almost all installations of equipment, concrete footers are essential to anchor and stabilize the equipment. The depth and size of footers should be according to freezing and soil conditions. In each instance the buyer should consult the proper person to determine the proper depth and size of the footers.

In most instances where the top of the concrete footer is set at the bottom of the surface material (sand, gravel, wood chips, etc.) or subsurface, due to the improper maintenance or wear, these footers become exposed. In order to help protect against such failures, it is suggested that the top of the concrete be 4-6 inches below the subsurface, filled in with soil and the area properly maintained.

6. A recommended maintenance chart of equipment shall include:
- A listing of each item or part which is considered necessary or desirable to be checked.
 - Type of maintenance (oiling, greasing, etc) that is necessary.
 - A time chart giving the recommended time interval for each maintenance procedure.

Rationale:

Most need for repair is identified by supervisors or citizens and probably then when something is broken. In making a guide maintenance chart which tells what, how and when to check equipment, more buyers become not only aware of the need for maintenance but how to tell employees how and when.

7. Statement to buyer, "For safety of the user this equipment shall not be placed over a hard surface such as concrete or asphalt. Recommended surfaces are: _____, etc.,"

Rationale:

Quite often the buyer does as he feels best or as a salesperson advises. A warning not to place over a hard surface along with suggested better surfaces as expressed in a report, should help eliminate hard surfaces under equipment.

8. Statement to buyer, "This equipment is designed for use by children between the age of _____ to _____."

Rationale:

Quite often a buyer is trying to provide for a certain age group, but becomes confused with the many equipment choices in the catalogs. Stating what age group the equipment is designed for will help to eliminate some confusion.

References

Consumer Product Safety Commission. "Fact Sheet #22"

Consumer Product Safety Commission. Pamphlet "Playground Equipment Guide"

Creative Play Systems

Curved Spaced Systems and Super Structure Systems – Synestructics Inc. Chatsworth, California

Form Incorporated – South Lyon, Michigan

Hill, Larry. Kreitzer, Jr., Chester. Kelly, Lawrence "Play Equipment – Maintenance" M-NCPPC, 9/19/1975

Landscape Structure of Delano, Minnesota #9

Mexico Forge. Reedsville, Pennsylvania

Miracles and Jamison. Grinnell, Iowa

National Recreation and Parks Association. Recommended standards For Playground Equipment

Timberform. Portland, Oregon

Appendices:

Appendix A – General Maintenance Checklist

Appendix B – Sample Playground Equipment Checklist

APPENDIX A - General Maintenance Checklist

Location: _____ County: _____

This following checklist can be used to determine the condition of a playground.

Place a check mark next to each of the following items that apply.

Surfacing - Make sure surfaces around playground equipment have at least 12 inches of wood chips, mulch, sand, or pea gravel, or are mats made of safety-tested rubber or rubber-like materials.

Check that protective surfacing extends at least 6 feet in all directions from play equipment. For swings, be sure surfacing extends in back and front, and twice the height of the suspending bar.

- The equipment has adequate protective surfacing under and around it and the surfacing materials have not deteriorated.
- Loose-fill surfacing materials have no foreign objects or debris.
- Loose-fill surfacing materials are not compacted and do not have reduced depth in heavy use areas such as under swings or at slide exits.

General Hazards

- There are no sharp points, corners or edges on the equipment.
- There are no missing or damaged protective caps or plugs.
- There are no hazardous protrusions and projections.
- There are no potential clothing entanglement hazards, such as open S-hooks or protruding bolts.
- There are no pinch, crush, and shearing points or exposed moving parts.
- There are no trip hazards, such as exposed footings on anchoring devices, rocks, roots, or any other environmental obstacles in the play area.

Deterioration of the Equipment

- The equipment has no rust, rot, cracks or splinters, especially where it comes in contact with the ground.
- There are no broken or missing components on the equipment (e.g., handrails, guardrails, protective barriers, steps or rungs on ladders) and there are no damaged fences, benches, or signs on the playground.
- All equipment is securely anchored.

Security of Hardware

- There are no loose fastening devices or worn connections, such as S-hooks.
- Moving components, such as swing hangers or merry-go-round bearings, are not worn.

Drainage

- The entire play area has satisfactory drainage, especially in heavy use areas such as under swings and at slide exits.

Leaded Paint

- The leaded paint used on the playground equipment has not deteriorated as noted by peeling, cracking, chipping or chalking.
- There are no areas of visible leaded paint chips or accumulation of lead dust.

General Upkeep of Playgrounds

- The entire playground is free from miscellaneous debris or litter such as tree branches, soda cans, bottles, glass, etc.
- There are no missing trash receptacles.
- Trash receptacles are not full.

NOTES: _____

ACTIONS TAKEN: _____

Inspector Name (print): _____ **Date:** _____

Signature: _____

SECTION 5.27 Powered Industrial Trucks (Forklifts)

The Commission has implemented this Directive for the use of powered industrial trucks and complies with Title 29 Code of Federal Regulations §1910.178, Powered Industrial Trucks.

PURPOSE

The purpose of this Directive is to define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of powered industrial trucks.

APPLICABILITY

The Directive applies to all Commission employees required to use powered industrial trucks to perform their assigned work duties.

DEFINITIONS

Forklift means a mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. Powered industrial trucks (forklifts) are also commonly known as pallet trucks, rider trucks, fork trucks, or lift trucks.

REQUIREMENTS

Operator Training

Operator qualifications

The Commission shall ensure that each potential operator of a powered industrial truck is capable of performing the duties that are required of the job.

In order to determine operator qualifications, the Commission shall ensure that each potential operator has received the required training, that each potential operator has been evaluated by a designated person while performing the required duties, and that each potential operator performs those operations competently.

Only trained and authorized persons are permitted to operate a forklift. No employee is allowed to operate a forklift without the proper training.

The following requirements shall be met to become a "Qualified Forklift Operator":

- Complete the educational requirement as stated above.
- Perform the demonstrated capability requirement satisfactorily. Each trainee, who satisfactorily completes the qualifications as outlined above, shall be issued a written document as evidence of being a Qualified Forklift Operator.

Training Program Implementation

The Commission shall implement a training program and ensure that only trained drivers who have successfully completed the training program are allowed to operate powered industrial trucks.

Exception: Trainees under the direct supervision of a designated person shall be allowed to operate a powered industrial truck provided the operation of the vehicle is conducted in an area where other employees are not near and the operation of the truck is under controlled conditions.

Training shall consist of a combination of classroom instruction (lecture, discussion, videotapes, and/or conference) and practical training (demonstrations and practical exercises by the trainee).

All training and evaluation shall be conducted by a designated person who has the requisite knowledge, training and experience to train powered industrial truck operators and judge their competency.

Training Program Content

Powered industrial truck operator trainees shall be trained in the following topics unless the employer can demonstrate that some of the topics are not needed for safe operation.

- Truck related topics.
- All operating instructions, warnings and precautions for the types of trucks the operator will be authorized to operate.
- Similarities to and differences from the automobile.
- Controls and instrumentation location, what they do and how they work.
- Power plant operation and maintenance.
- Steering and maneuvering.
- Visibility (including restrictions due to loading).
- Fork and attachment adaptation, operation and limitations of their utilization.
- Vehicle capacity.

Vehicle Stability

- Vehicle inspection and maintenance.
- Refueling or charging, recharging batteries.
- Operating limitations.
- Any other operating instruction, warning or precaution listed in the operator's manual for the type vehicle which the employee is being trained to operate.

Workplace Related Topics

- Surface conditions where the vehicle will be operated.
- Composition of probable loads and load stability.

- Load manipulation, stacking, unstacking.
- Pedestrian traffic.
- Narrow aisles and other restricted places of operation.
- Operating in hazardous classified locations.
- Operating the truck on ramps and other sloped surfaces that could affect the stability of the vehicle.
- Other unique or potentially hazardous environmental conditions that exist or may exist in the workplace; and
- Operating the vehicle in closed environments and other areas where insufficient ventilation could cause a buildup of carbon monoxide or diesel exhaust.

Evaluation and Refresher or Remedial Training

Sufficient evaluation and remedial training shall be conducted so that the employee retains and uses the knowledge, skills and ability needed to operate the powered industrial truck safely.

An evaluation of the performance of each powered industrial truck operator shall be conducted at least annually by a designated person.

Refresher or remedial training shall be provided when there is reason to believe that there has been unsafe operation, when an accident or a near-miss occurs or when an evaluation indicates that the operator is not capable of performing the assigned duties.

Certification

The Commission shall certify that each operator has received the training, has been evaluated as required by this paragraph, and has demonstrated competency in the performance of the operator's duties. The certification shall include the name of the trainee, the date of training, and the signature of the person performing the training and evaluation.

The Commission shall retain the current training materials and course outline or the name and address of the person who conducted the training if it was conducted by an outside trainer.

Operator Selection

Prospective operators of powered industrial trucks should be identified based upon their ability to be trained and accommodated to perform job functions that are essential to the operation of a powered industrial truck. Determination of the capabilities of a prospective operator to fulfill the demands of the job should be based upon the tasks that the job demands.

The Commission shall identify all the aspects of the job that the employee must meet/perform when doing his or her job. These aspects could include the level at which the employee must see and hear, the physical demands of the job, and the environmental extremes of the job.

One factor to be considered is the ability of the candidate to see and hear within reasonably acceptable limits. Included in the vision requirements is the ability to see at a distance and peripherally. In certain instances, there also is a requirement for the candidate to discern different colors such as red, yellow and green.

The environmental extremes that might be demanded of a potential powered industrial truck operator include the ability of the person to work in areas of excessive cold or heat.

After an employee has been trained and appropriate accommodations have been made, the employer needs to determine whether the employee can safely perform the job.

The Method(s) of Training

Among the many methods of training are the lecture, conference, demonstration, test (written and/or oral) and the practical exercise. In most instances, a combination of these methods have been successfully used to train employees in the knowledge, skills and abilities that are essential to perform the job function that the employee is being trained to perform.

To enhance the training and to make the training more understandable to the employee, trainers have used movies, slides, videotapes and other visual presentations. Making the presentation more understandable has several advantages including:

- (1) Employees being trained remain more attentive during the presentation if graphical presentations are used, thereby increasing the effectiveness of the training;
- (2) Use of visual presentations allows the trainer to ensure that the necessary information is covered during the training;
- (3) Use of graphics makes better utilization of the training time by decreasing the need for the instructor to carry on long discussions about the instructional material; and
- (4) Use of graphics during instruction provides greater retention by the trainees.

Training Program Content

Because each type (make and model) powered industrial truck has different operating characteristics, limitations, and other unique features, an optimum employee training program for powered industrial truck operators must be based upon the type vehicles that the employee will be trained and authorized to operate. The training must also emphasize the features of the workplace, which will affect the manner in which the vehicle must be operated. Finally, the training must include the general safety rules applicable to the operation of all powered industrial trucks.

Selection of the methods of training for operators has been left to the reasonable determination of the employer. Whereas some employees can assimilate instructional material while seated in a classroom, other employees may learn best by observing the conduct of operations (demonstration) and/or by having to personally conduct the operations (practical exercise). In some instances, an employee can receive valuable instruction through the use of electronic mediums such as videotapes and movies. In most instances, a combination of the different training methods may provide the best training in the least amount of time. OSHA has specified that the training must consist of a combination classroom instruction and practical exercise. The use of both modes of instruction is the only way of assuring the trainee has received and comprehended the instruction and can utilize the information to safely operate a powered industrial truck.

Initial Training

The following is an outline of a generalized forklift operator-training program:

- **Characteristics of the powered industrial truck(s)** the employee will be allowed to operate:

- Similarities to and differences from the automobile.
- Controls and instrumentation: location, what they do and how they work.
- Power plant operation and maintenance.
- Steering and maneuvering.
- Visibility.
- Fork and/or attachment adoption, operation and limitations of their utilization.
- Vehicle capacity.
- Vehicle stability.
- Vehicle inspection and maintenance.
- Refueling or charging, recharging batteries.
- Operating limitations.
- Any other operating instruction, warning or precaution listed in the operator's manual for the type vehicle that the employee is being trained to operate.

➤ **The Operating Environment**

- Floor surfaces and/or ground conditions where the vehicle will be operated.
- Composition of probable loads and load stability.
- Load manipulation, stacking and un-stacking.
- Pedestrian traffic.
- Narrow aisle and restricted place operation.
- Operating in classified hazardous locations.
- Operating the truck on ramps and other sloped surfaces which would affect the stability of the vehicle.
- Other unique or potentially hazardous environmental conditions which exist or may exist in the workplace.
- Operating the vehicle in closed environments and other areas where insufficient ventilation could cause a buildup of carbon monoxide or diesel exhaust.

Trainee Evaluation

The provisions of these proposed requirements specify that an employee evaluation be conducted both as part of the training and after completion of the training. The initial evaluation is useful for many reasons, including:

The Commission shall determine what methods of instruction will produce a proficient truck operator with the minimum of time and effort.

The Commission can gain insight into the previous training that the trainee has received; and a determination can be made as to whether the trainee will be able to successfully operate a powered industrial truck. This initial evaluation can be completed by having the employee fill out a questionnaire, by an oral interview, or by a combination of these mechanisms. In many cases, answers received by the employee can be substantiated by contact with other employees or previous employers.

Refresher or Remedial Training

The type information listed in this appendix would be used when the training is more than an on-the-spot correction being made by a supervisor or when there have been multiple instances of on-the-spot corrections being made. When an on-the-spot correction is used, the person making the correction should point out the incorrect manner of operation of the truck or other unsafe act being conducted, tell the employee how to do the operation correctly, and then ensure that the employee performs the operation correctly.

The following items may be used when a more general, structured retraining program is utilized to train employees and eliminate unsafe operation of the vehicle:

- Scenarios of common unsafe situations encountered in the workplace.
- Observed unsafe methods of operating.
- Need for constant attentiveness to the vehicle, the workplace conditions and the manner in which the vehicle is operated.

INSPECTION and MAINTENANCE

Each forklift truck operator shall inspect their vehicle at the start of each shift and document this inspection on the Commission Daily Forklift Inspection Form. Any noted condition that affects the safe operation of the lift truck shall be reported to the operator's supervisor for corrective action and shall keep the lift truck from being operated until the unsafe condition is corrected.

Forklifts that are defective, in need of repair or are unsafe shall be tagged "Danger - Do Not Operate" and taken out of service until restored to safe operating condition.

A maintenance log shall be kept on each forklift to determine when required maintenance is due. Only qualified personnel shall perform maintenance and repair.

GENERAL

Stunt driving and horseplay shall not be permitted.

All forklifts shall be equipped with seat belts and utilized by the operator when in use.

Personnel are not permitted to ride on forklifts except in designated seats that are part of the equipment design.

All forklifts shall be equipped with a 5-pound ABC dry chemical fire extinguisher.

Under all travel conditions the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner.

All traffic regulations shall be observed, including authorized work site speed limits. A safe distance of approximately three forklift lengths from the forklift truck ahead shall be maintained. The driver shall be required to slow down and sound the horn at cross aisles and other areas where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.

The driver shall be required to look in the direction of, and keep a clear view of, the path of travel.

Forklifts shall have a functional horn and back-up alarm with a distinctive sound that is loud enough to be heard clearly above background noises. There are other scenarios where a flashing yellow/amber light would be installed. An Addendum referencing any requirements of such lights shall be added to this manual section.

Copies of the manufacturer's operating instructions for each type of forklift shall be readily available for review by operators and supervisory personnel.

Lift trucks, stackers, etc., shall have the rated capacity clearly posted on the vehicle so that it is clearly visible to the operator. When the manufacturer provides auxiliary removable counterweights, corresponding alternate rated capacities also shall be clearly shown on the vehicle. These ratings shall not be exceeded.

No modifications or additions, which affect the capacity or safe operation of the equipment, shall be made without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, maintenance instruction, plates, tags, or decals shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced.

If a load is lifted by two or more forklifts working in unison, the total load carried by all shall not exceed their total combined capacity. This would be considered a non-routine task. Therefore, a Job Safety Analysis (JSA) is recommended.

Steering or spinner knobs shall not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering hand wheel to spin. The steering knob shall be mounted within the periphery of the wheel.

All forklifts shall have the manufacturer's nameplate showing its weight with attachments, lifting capacity, lift height maximum and other pertinent data. Nameplates or markings shall be maintained in a legible condition and remain in place at all times.

Railroad tracks shall be crossed diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.

Grades shall be ascended or descended slowly.

When ascending or descending grades in excess of 10 percent, loaded forklifts shall be driven with the load upgrade.

Unloaded forklifts should be operated on all grades with the load engaging means downgrade.

On all grades, the load and load engaging means shall be tilted back if applicable and raised only as far as necessary to clear the road surface.

No person shall be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.

There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler systems, etc.

Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the forklift.

When a forklift is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set. Wheels shall be blocked if parked on an incline.

A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform, or freight car. Forklifts shall not be used for opening or closing freight doors.

Brakes shall be set and wheel chocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. Prior to forklift entry, the flooring and frames of trucks, trailers and railroad cars shall be checked for breaks and weakness before they are driven into and to determine if it will bare the intended weight of the forklift and intended load.

Dock board or bridge plates shall be properly secured before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly and their rated capacity should never be exceeded. Portable dock boards shall be secured in position, by being anchored or equipped with devices that will prevent their slipping.

An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load.

Additional counter weighting of forklifts shall not be allowed unless approved by the manufacturer.

REFUELING and BATTERY CHANGING/CHARGING

Refueling and battery charging operations shall be performed only in designated areas. Open flames, smoking, sparks or electric arcs shall be eliminated from refueling and battery changing/recharging areas.

All forklifts shall be properly positioned, brakes applied, and turned off before attempting to refuel or change/recharge battery.

Appendices:

Appendix A – Forklift Inspection Form

Appendix B – Forklift Operator Evaluation Form

Appendix A – Forklift Inspection Form

**The Maryland-National Capital Park and Planning Commission
Forklift Inspection Form**

SAFETY AND OPERATIONS CHECKS (Prior to use) Facility: _____ Date: _____	OK	NOT OK	N/A
Fuel Odor Present (DO NOT START TRUCK - Report to your Supervisor Immediately)			
Fuel Level - Leaks			
Tires - Condition and Pressure			
Overhead Guard – Broken welds, missing bolts or other damage			
Load Backrest Extension			
Capacity Plate - Attached (Including Attachment Data)			
Safety Warnings - Attached (Refer to Parts Manual for Location)			
Hour Meter Functioning			
Safety Devices – Back-up alarm, flashing light (beacon)			
Horn			
Lights			
Shift Linkage			
Accelerator Linkage			
Service Brake			
Parking Brake			
Steering Operation			
Hoist and Lowering Control			
Tilt Control - Forward and Back			
Attachment Control			
Mast Operation			
Main Hydraulic Tank Level			
Hydraulic Leaks - Valves, Hoses, Fittings, Cylinders, Etc.			
Forks, Top Clip Retaining Pin and Heel Condition			
Unusual Noise (Must be Investigated Immediately)			
Battery - Water level, cell caps, terminals in place, cables in good condition - Use safety			
Engine Oil Level - Leaks			
Engine Oil Pressure			
Engine Air Filter - Squeeze Rubber Dirt Trap or Check the Restriction Alarm/ Indicator			
Water or Anti-Freeze Level - Leaks			
All Belts			
Seat Belt			
Fire Extinguisher			
Transmission Fluid Level			
Cab - Heater, Defroster, Wipers (If Equipped)			
Propane Tank, Rust, Corrosion, Damage			
Propane Tank, Propane Hose			
Propane Odor			
Other Deficiencies Noted:			

Operator Signature: _____

Date: _____

Instructions: Safety Checklists shall be maintained on file for one year at the facility. The Safety Checklist shall be made available upon request for inspection by the Risk Management and Safety Office.

Appendix B – Forklift Operator Evaluation Form

The Maryland-National Capital Park and Planning Commission

Forklift Operator Evaluation

Operator Name:		Evaluator Name:				
Date of Evaluation:		Equipment Operated:				
Operator Behaviors		Good	Fair	Poor	N/A	Comments
Pre-use inspection						
1. Follow the operator’s daily checklist		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Looks for damage		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Document all damage		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Picking Up a Load						
1. Square up on the center of the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Stop with the fork tips about 1 foot from the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Clear personnel from the area of the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Level the forks, then slowly drive forward until the load contacts the carriage		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Lift the load carefully and smoothly until it is clear		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Tilt the mast back slightly to stabilize the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Look over both shoulders		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. After out and stopped, lower the load to travel height		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Traveling						
1. Do not raise or lower the load and forks while traveling		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Maintain a safe speed		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Observe all traffic rules, warning signs, floor load limits, and overhead clearances		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Keep arms and legs inside the forklift		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Follow other vehicles at a safe distance		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Slow down when cornering		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Use the horn to alert others		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Travel with the load facing uphill while on a ramp or incline.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Stop smoothly		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Putting Down A Load						
1. Make sure there is sufficient clearance for the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Clear personnel from the area near the load		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Square up to the location; then stop about 1-foot away		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Raise the load to placement level		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Move slowly forward.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the load is on the pallet, lower it into position and lower the forks further		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Look over both shoulders before backing out.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Back strait out until the forks have cleared		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Lower the forks to traveling position		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B – Forklift Operator Evaluation Form (cont)

The Maryland-National Capital Park and Planning Commission

Forklift Operator Evaluation

Operator Behaviors	Good	Fair	Poor	N/A	Comments
Parking					
1. Fully lower the forks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Neutralize the controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Set the brakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Turn off the power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. If parked on an incline, block the wheels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Park only in authorized areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fueling and Battery Recharging					
1. Engine off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Fire extinguisher nearby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Use required personal protective equipment as required by the Safety Department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Safe fueling and battery recharging procedures followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Spills cleaned up immediately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Based on my evaluation, the operator has **successfully** completed the evaluation and is qualified to operate the following equipment.

Equipment Type:

Based on my evaluation, the operator **has not demonstrated** competence in operating the equipment.

Evaluator Signature

Instructions: This form shall be completed by the individual conducting the employee's practical forklift exercise.

SECTION 5.28 Recreation

PURPOSE

The purpose of this Directive is to define the procedures and standards for employees working in recreation related operations and facilities.

APPLICABILITY

The Directive applies to all Commission employees involved in recreation activities as part of their assigned work duties.

INTRODUCTION

Leisure time activities place people in a wide variety of accident-producing conditions and activities. Such conditions and activities may be spontaneous or planned, informal or structured, uninhibited or supervised. Accident-producing actions may involve running, climbing, striking, throwing, jumping, soaring, building, riding, swimming, or similar activities. Unfortunately, the effort required to prevent accidents when people are at play often is ignored. But accident prevention efforts must be made to develop proper regard for safety without sacrifice of the personal satisfaction and pleasure that people seek from recreational activities.

The responsibility for occupational safety and health standards in the Commission has been assigned to the Risk Management and Safety Office. Employees are encouraged to become familiar with this manual and abide by those standards and rules that apply.

ALL-STAFF RESPONSIBILITIES

Office Safety

1. Handle and use equipment with due respect for its limitations and with proper concern for the protections of others.
2. Unplug electric cords when equipment is not in use.
3. Remove protruding nails from boards and walls.
4. Keep office and storage rooms, etc., free of trash and unnecessary equipment.
5. A complete first-aid kit should be available (See Red Cross list).
6. Office furniture should be arranged to allow easy traffic flow and minimize the possibility of tripping or bumping into heavy objects.
7. Wipe up any wet floor because of rain or snow to prevent slipping.
8. No attempt should be made to lift an object beyond your physical ability.
9. Store flammable materials in a safe place.
10. Do not overload electrical circuits.

11. Fire escape routes should be clearly posted.
12. Use metal trash cans only.

Motor Vehicles

1. Follow the Commission's preventive maintenance schedule.
2. Avoid conditions or practices that interfere with your normal skill and judgment as a driver.
3. Take the defensive driving course offered through the Commission.
4. Use seat belts at all times when driving a Commission vehicle. (Practice 6-10)
5. Any vehicle malfunctions should be reported to the Trades & Development Division's Automotive Shop immediately.
6. Keep vehicle clean and free from litter.

RECREATION PROGRAMS

Seasonal

1. **Day Camps* - Pre-School Programs**
 - a. Provide sufficient equipment storage and facilities, kept in safe operating condition to carry out stated objectives and programs.
 - b. Buildings or required other structures should be constructed safely and in accordance with any building code applicable to a given locality, and maintained in safe condition.
 - c. Site should be clean and free from unnecessary hazards and litter; such as: broken glass, traffic, etc.
 - d. First-aid kit properly maintained.
 - e. Post rules and regulations.
 - f. Health forms required.

*See Day-Camping Manual

2. **Summer Playgrounds***
 - a. Provide a pre-service training section devoted to common safety and first-aid practices for summer employees.
 - b. Maintain equipment and facility in safe operating condition.
 - c. Encourage usage of proper protective equipment; i.e., catcher's mask, chest protectors, etc.
 - d. Register all participants - to include name, address, and phone numbers.
 - e. Adhere to "Guidelines and Standards for Bus Trips."
 - f. Permission slips are needed for all off site trips.
 - g. Post rules and regulations.
 - h. Pollution alerts and other hazardous weather conditions should be considered when programming.

*See Summer Playground Manual

3. **Special Events**
 - a. Site or building should be easily accessible and free from any unnecessary hazards.
 - b. First-aid kit available.
 - c. Proper protective equipment worn when necessary.
 - d. Plan for emergencies - post exit signs, notify park police, etc.

Part-Time Programs

1. Recreation Classes

- a. All classes should have three major ingredients: 1) a qualified instructor; 2) a suitable facility; and 3) proper equipment.
- b. Some classes may be covered in other divisions for safety guidelines. For example:

Sports - tennis, sailing, horseback riding, softball, baseball, football, basketball, archery, gymnastics, skiing.

Enterprise - golf, tennis, swimming, ice skating.

Arts - drama, piano, voice, art, pottery, dance, technical theater.

Special Services - sign language, and others.

- c. There are some special interest classes such as: hang gliding, backpacking, and cross country skiing, that should have their own rules of safety to govern their operation. High Risk activities, such as horseback riding, should also be included in a separate category or combined with special interest. All instructors should have proper certification.
- d. Horseback Riding
 - Insurance coverage by owner of horses and/or facility where classes are held.
 - Hard helmet must be worn by students when jumping.
 - Suitable clothing and shoes with hard soles and heels must be worn.
 - Animals must be clean and healthy with proper inoculations.

*Recreation Manuals are available for the following classes: sail boating, gymnastics, pottery, and pre-school.

2. Sports

Due to the very nature of sports and contact games, injuries and accidents occur. However, by taking a few precautions and preventative measures, often accidents can be avoided.

Softball

- Catchers and umpires should be required to wear facemasks, chest protectors, and shin guards.
- Safety batting helmets must be worn by all batters.
- Before playing, make sure area is free from litter and any unnecessary hazardous conditions, such as pieces of glass, metal large rocks, and sharp objects.

Basketball

- Make sure indoor courts are dry and clean.
- Outdoor courts should be free of litter and any other hazards.
- Repair any broken or chipped rims.
- Metal chain rims, predominantly on outdoor courts, should have no broken links.

Street Hockey

- Indoor surfaces are best. If you must play outside, see that the playing area is enclosed and clear of debris.
- Hockey sticks must be kept low and close to the ground.
- Goalies must be equipped with facemasks, chest protectors, leg pads, and a catching gloves. Other players need only shin guards - the limited amount of pads discourages rough contact.

Volleyball

- Inspect standards to see that they are mounted and secured properly.
- Spectators clear of playing area.
- Nets should be even and without snags or rips.
- Court surface should be dry and clean and free of any sharp objects.

Gymnastics

- Spotters are necessary at all times.
- Safety mats should be properly placed.
- Equipment must be cleaned and maintained regularly.
- Area must be clear of litter.

Weightlifting

- Skilled supervisors must be on the spot to assist novices and young participants.
- Basic lifting rules must be followed.
- No horse playing or showing off.
- Inspect playing fields for sharp and dangerous objects.
- Grass should be mowed regularly and kept neat and clear of litter.
- Unnecessary roughness and holding should be severely penalized.

Roller-skating

- Refer to Teen Activity Manual or Roller-skating Manual for Leaders.

3. **Supervised Gyms**

Several injuries have occurred in supervised gyms throughout the Commission. Here are several things to be aware of for personal health and safety.

- Gym floor should be free of litter and any other hazards such as water puddles from leaky roofs, etc.
- Avoid unnecessary running.
- Make sure that gymnastic ropes and rings are secured to the ceiling or a wall.
- All equipment not used should be stored safely away from participants.
- All participants should possess an active recreation membership card when participating at a M-NCPPC facility.
- Weight machines should be in good working order with close supervision.
- Avoid using metal basketball nets whenever possible.
- Safety mats should be used for all gymnastic events.
- Never leave the gym unsupervised.

4. **Teen Clubs**

- Sound Decibel Levels - see Safety Rules and Practices. (This should be added to Teen Activity Book - if acceptable.)
- Ratio of chaperones to participants. See guide for trips or identify for on site program.

SPORTS OFFICE

GENERAL SPORTS SAFETY POLICIES

1. Observe all rules established by national governing bodies and distribute or inform coaches where such rules can be obtained.

2. Observe all rules of safety equipment established by officials or leagues. Example: Keep bats out of the playing area (softball, baseball.)
3. Enforce use of all safety equipment established by national rules. Example: In tackle football, helmets and other proper safety equipment must be worn at all times.
4. Alter rules for safety purposes in cases of less skilled or younger participants. Example: Prohibit sliding in softball for young girls.
5. Do not play outdoor sports in inclement weather. Example: Lightning. Please note the definition of inclement will vary with the nature of the sport. Example: Softball cannot be played in the rain, but football can.
6. Do not play on any fields or courts which officials deem unsafe. It is advisable to employ professional official associations, which establish guidelines concerning safe playable conditions.
7. Use restraining lines or other boundary devices to keep spectators out of the playing areas.
8. Establish weight and/or age classification for youth for competition purposes to equalize size.
9. Separate youth and adult competition in all contact sports.
10. Conduct clinics for each sport for coaches to teach proper skills and explain all rules.
11. Train all personnel in first aid techniques.
12. Post any safety rules at playing areas.
13. Stop all games immediately should an unsafe condition emerge; such as, rain or if teams exhibit conduct, that could result in an injury or an uncontrollable condition.

Liming Athletic Fields

1. Safety goggles, a paper respirator, long sleeve shirts or jackets (buttoned) and gloves need to be worn.
2. Handle lime bags carefully.
3. Fill limer with wind at your back and pour lime into limer gradually, DO NOT DUMP all at once.
4. Secure lid on limer after filling to prevent lime from bouncing back into face when liming on rough ground.
5. Use two people, one on each side of limer, when loading or unloading limer from truck.
6. DO NOT let limer drop when unloading from truck, set it down gently.
7. DO NOT throw limer up onto truck, lift on gently and set limer in truck, then secure it from rolling around in back of the truck.

ENTERPRISE DIVISION

ICE RINKS AND SWIMMING POOLS

MAINTENANCE ITEMS

1. Pants, shirt and shoes must be worn while working in the mechanical area (compressor or filter room) to protect bare skin from chemicals.
2. Appropriate clothing should be worn when handling chemicals or performing maintenance tasks. Gloves should be worn. Goggles should be worn when handling chemicals, i.e., C12, Acid.
3. Two people are required to safely accomplish the following:
 - a. Backwashing-Allentown
 - b. Changing hairstrainer, outdoors-Allentown
 - c. Lighting gas pilot-Banks
 - d. Addition of acid-all pools
 - e. Have adequate supervision, personal protection and number of workers to move any heavy piece of equipment.
4. Keep lids on chemicals tightly closed.
5. Store unlike chemicals so they do not come in contact with each other. Label all chemicals. Train personnel in handling and possible hazards involved in the use of chemicals.
6. Avoid shocks by careful handling of all extension cords and electrical appliances.
7. Turn off appropriate main electrical switch before testing fuses.
8. Chemicals may not be added directly to the-pool when swimmers are in it.
9. Clean all containers, which have held chemicals immediately after use. Do not mix chemicals of any kind. Do not add water to acid. Be sure there is adequate ventilation. Do not use chlorine (or equivalent) near oil or grease.
10. Surge tanks are to be kept closed when not in use.
11. Only authorized employees with knowledge of the equipment should be allowed to operate this equipment: skate sharpener, Zamboni ice resurfacers, pool equipment, and compressors.

GENERAL SAFETY FOR PATRONS

1. Do not swim unless a lifeguard is on duty.
2. No swimming during unscheduled times without permission.
3. No running.
4. No unnecessary conversation with lifeguards.
5. At least one lifeguard on duty will be in a guard chair.

6. Outdoor pools must be closed for electrical storm activity.
7. Staff should report any unsafe equipment immediately.

GOLF COURSE MAINTENANCE

EQUIPMENT

1. DO NOT go away from any machine and leave it running.
2. When leaving equipment for extended length of time (lunch break) take the key out of it.
3. DO NOT adjust the reel while a mower is turned on.
4. When parked on a hill, be sure machine is secure by either parking brake or locked in gear.
5. Use common sense. NOT TOO fast in close areas.
6. DO NOT operate chain saws when weather is wet, primarily because of slippery footing.
7. Read directions and any safety precautions and other decals on the machine and follow these directions.
8. DO NOT operate equipment or allow anyone you have trained to operate equipment unless they feel they can operate it effectively. If they fear the machine, either train more or take them off of it.

SHOP AND OUTSIDE

1. Be sure shop is clean. Leave no tools lying around; hang tools up.
2. Be sure shop is swept clean and has good appearance.
3. Wear hard toe and sole shoes.
4. Lift heavy articles with knees bent; keep your back straight.
5. Do not grind reels or bed knives without safety goggles.
6. Do not hammer metal objects unless safety goggles are worn.
7. Do not operate known faulty equipment (brakes, drills).
8. In all categories - Equipment - Pesticides - Shop & Outside use common sense and plan through dangerous situations.
9. Put up and obey no smoking signs around FLAMMABLE areas.
10. Be sure Fire Extinguishers are ready to use.

GOLF COURSE SAFETY PRECAUTIONS

THE USE OF PESTICIDES

1. Always have soap and water available at barn. Wash off before eating or in case of a spill.
2. Do not carry pesticides in cab of truck.
3. Use Rubber Gloves when handling PESTICIDES.
4. Read the label before using PESTICIDES.
5. Use a respirator when using a PESTICIDE with the POISON Signal word.
6. Use a respirator when using a PESTICIDE with the WARNING Signal word.
7. When using a highly toxic chemical or using POISON – always do the following:
 - a. Wear long gloves.
 - b. Wear rubber coveralls.
 - c. Wear rubber boots.
 - d. Wear goggles or face shield.
 - e. Have your neck and head covered.
8. If not using highly toxic PESTICIDES but are handling less toxic chemicals,
 - a. Use rubber gloves when handling and applying pesticides.
 - b. Wear long sleeve shirts.
 - c. Use face shield or goggles (even during Fielding operations).
 - d. Use respirator or particle mask.
9. Wash residue off of tank when finished.
10. Wash hands after use.
11. Have an EXTRA change of clothes on the job in case of an accidental spill.
12. If you have excess pesticide mix, apply properly to another area. DO NOT SPILL OUT.

HISTORICAL AND NATURE FACILITIES SAFETY CHECKLIST

The purpose of these guidelines is to provide each employee and visitor with a safe and healthful environment.

1. No one should put their hands into a poisonous snake cage. One person will be assigned to feed and care for these animals.
2. Visitors are not allowed to stand on the edge of an open indoor pond or place their hands or feet into it.
3. Know where your nearest hospital is located and the emergency number - 911.
4. Never force anyone to handle an animal against their will.

5. No horseplay or unsafe practical jokes will be tolerated.
6. Make exhibits and seats sturdy and hazard free.
7. Do not let children use sharp unprotected blades for craft projects.
8. Use caution, and if possible, heavy gloves when handling untamed animals.
9. Do not display poisonous plants within a facility, within a small child's reach.
10. Be informed of any allergies or of any special health problems of the staff and/or visitors.
11. Do not let small children carry a walking stick while on a hike or in a facility.
12. Be able to identify all state-wide poisonous snakes and spiders.
13. Be sure that you can positively identify any plant that you or anyone else tastes or eats.
14. Do not drink stream or surface water; be sure that spring water meets Health Department standards.
15. Wear proper shoes for hiking when in the woods.
16. Be careful when walking through the woods that swinging branches do not injure those who follow.
17. Do not cross slippery wet logs and rocks.
18. Do not give hikes on very windy days, use caution.
19. Be familiar with the area trails before taking a group for a walk.
20. Do not exceed vehicle capacity nor carry passengers in open beds of trucks.
21. Do not pick up any road-killed mammals from May through the end of August.
22. Use caution when exploring under rocks, in cracks, crevices, holes, etc.
23. For maintenance work, see Trades & Development rules.

WATER-ORIENTED ACTIVITIES SAFETY CHECKLIST WATER ACTIVITIES.

1. Train all staff in water safety, small craft operation, and emergency first aid.
2. Always be aware of changing weather conditions. Check the forecast before departure.
3. Advise boaters about river conditions.
4. Tell boaters and canoeists to avoid other boats, swimmers, fishermen and solid objects.
5. Always be careful on boat ramps; they may be slippery.

6. Make sure you have some line to secure your boat or canoe when docking.
7. Tell Park visitors no swimming in river from Park areas; be informed of Park regulations.
8. Make sure first aid kit is available.
9. Regularly inspect docks, ramps, boardwalk, and fishing piers for safety hazards.

Canoes

10. Provide paddles, which are in good condition.
11. There can be no more than 500 lbs. per canoe or 2 adults and 1 child. Relates to canoe size. Never overload canoes.
12. Anyone under the age of 16 must be accompanied by an adult in the canoe.
13. Do not stand up in a canoe.
14. Two people should carry a canoe.
15. Allow canoes to be operated depending on weather conditions and experience of group.
16. Everyone in a canoe or boat must wear a personal floatation device.
17. Operate the canoe and/or other craft only after proper training.
18. Stand to the side of the canoes when strapping them with the bungees onto a canoe trailer.

Power Boats

19. Be sure the current and/or gas is disconnected when working on a power boat.
20. Gas powered boats must have a fire extinguisher. It must be U.S. Coast Guard approved or be labeled "Marine Type by Underwriters Lab, Inc."
21. All motorboats from 16' to 26' must have an operative emergency horn or whistle in working order.
22. Power boats under 27' must have a 32-point white stern light and a combination 20-point red and green light on the bow.
23. Do not operate a powerboat when there is a danger of lightning.
24. Do not overload boats or canoes at any time.
24. Two short air horn blasts means to return to shore.

SECTION 5.29 Respiratory Protection

The Commission has implemented this directive for the use of respiratory protective equipment and shall comply with Title 29 Code of Federal Regulations (CFR) §1910.134, Respiratory Protection; §1910.252, Welding, Cutting and Brazing; §1910.1000 Air Contaminants; § 1910.94, Ventilation. American National Standards Institute (ANSI) Z88.2-1980, “Standards Practices for Respiratory Protection”.

PURPOSE

The purpose of this directive is to establish a program for the appropriate and effective use, care, control, maintenance, inspection, and operation of respiratory protective equipment.

APPLICABILITY

This directive applies to all Commission employees required to use respiratory protective equipment to perform their assigned work duties.

DEFINITIONS

Class C Respirator includes all half mask and full face negative pressure respirators.

Class D Respirator means an escape respirator only.

Employee Exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End-of-service Indicator (ELSI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection.

Fit Factor means a qualitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit Test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual (see Qualitative Fit Testing and Quantitative Fit Testing).

Immediately Dangerous to Life or Health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Negative Pressure Respirator means a respirator, which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Oxygen Deficient means an atmosphere with oxygen content below 19.5% by volume.

Positive Pressure Respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air-purifying element outside the respirator.

Qualitative Fit Testing means a pass/fail test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative Fit Testing means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

RESPONSIBILITIES

Risk Management and Safety Office:

Overall accountability for this directive with direct program implementation.

Reviews the effectiveness of this directive on a regular basis.

Interacts with location management regarding the approval and/or changes in the respiratory protection directive.

Ensures the proper selection of respirators.

Periodically audits respirator permitted areas to determine the effectiveness of the directive.

Identify and evaluate operations that contain airborne contaminants.

Remove unapproved respirators from service.

Ensure that employee training, fit testing and medical evaluation requirements are met and properly documented.

Provide medical personnel with requested work-related information to assist in the medical examination.

Provide medical information on environmental conditions that the respirator shall be worn in.

Supervisors

Ensure compliance with this directive within their department.

Ensure correct respirators are available to department employees.

Ensure that a tight fitting face piece respirator is not worn when conditions prevent a good face seal, e.g., facial hair that interferes with the face seal or temple pieces on glasses.

Notify the Risk Management and Safety Office of any personnel or process changes.

Refer all persons requiring certification (in their area) to the Risk Management and Safety Office for medical evaluation, fit testing and training prior to being assigned work requiring the use of respirators.

Employees

Ensure proper training is obtained before donning a respirator.

Ensure that a tight fitting face piece seal is available when required to wear a respirator.

Check the respirator fit after each donning as instructed.

Ensure that the respirator is inspected and in working order prior to donning and use.

Ensure that the respirator is kept clean and properly sanitized.

REQUIREMENTS

General

Employees shall not be allowed to enter an area requiring the use of a respirator without meeting all of the requirements of this directive.

Medical evaluations shall be required of all tight face fitting respirator users. The medical evaluation parameters are determined by a physician or other licensed health care professional (PLHCP) and the required regulations.

Hazard Evaluation

The Risk Management and Safety Office shall identify respiratory health hazards in the workplace. The hazard evaluation shall be established using a periodic inspection schedule to determine exposure or changing work conditions.

Respirator Selection

The type of exposure (routine, non-routine, emergency) and expected airborne type and concentration level shall be considered when making a respirator selection. Only respirators approved by National Institute for Occupational Safety and Health (NIOSH) shall be used. The Risk Management and Safety Office shall identify the type of respirators to be evaluated for employee selection. Employees shall be given a choice of style and size from this selection.

Respirator Assignment

Supervisors shall be responsible for enforcing regular respirator use. Respirators shall be issued for routine and non-routine work to employees after the medical evaluations, training and fit testing.

Training

Training shall be conducted when respirators are first issued or when any employee is assigned to a new area where respirator use is required. The supervisor is responsible for notifying the Risk Management and Safety Office before new employees enter those applicable areas. Employees shall be instructed to change cartridges/canisters when breakthrough occurs or after each use. Employees shall be instructed to change filters when increased resistance occurs or after each use.

Employee training shall include:

- An opportunity to handle the respirator.
- Proper fit testing.
- Test of the face piece seal.
- A familiarizing period of wear in normal air.
- Explanation of how a particular type of respirator was selected and its limitations.
- Why a respirator is necessary.
- How to clean a respirator.
- How to maintain, clean and change cartridges and filters.
- How to inspect, put on and remove a respirator.
- How to recognize medical signs and symptoms.

Employee re-training shall be conducted annually and when:

- There are changes in the workplace or the type of respirator rendering previous training obsolete.
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the required understanding or skill needed to use the respirator.

During the fit testing provide or allow:

- Demonstration in putting on and removing a respirator.
- Practice in wearing a respirator.
- Adjusting parts of equipment.
- How to determine the fit with positive and negative fit checks.
- Practice in the positive and negative fit tests.

Spirometry Testing Program

The objective of the cardiac pulmonary function testing for Commission employees who are required to wear a respirator to perform their jobs in a safe manner.

Methodology

Spirometric testing shall be conducted by the Commission's medical provider or other licensed health care professional (PLHCP) prior to being assigned to use a face-fitting respirator.

Cardiac pulmonary function testing shall be performed for employees in the following job classifications:

- Aircraft Mechanic
- Art Exhibit Specialists
- Building Service Superintendent
- Carpenter
- Gardener
- Golf Course Supervisor
- Greenhouse Nursery Technician
- HVAC Mechanics
- Mason
- Mechanic
- Painter
- Pesticide Applicators (regardless of classification)
- Police Officer (all ranks)
- Plumber
- Tree Maintenance Supervisor
- Welder

Medical Evaluation

Prior to fit testing, employees shall have a medical evaluation and pulmonary function test (spirometry) performed by a physician or other licensed health care professional (PLHCP) prior to being assigned to use a face-fitting respirator. A medical questionnaire shall be completed by the

PLHCP. The PLHCP shall determine that each employee exposed to potential occupational respiratory hazards is capable of wearing the required respiratory equipment. The PLHCP shall provide the Risk Management and Safety Office with a certification report that the employee is capable of wearing a respirator during working operations.

Employees shall be fit tested prior to respirator utilization with their work activities.

Additional medical evaluations

At a minimum, the employer shall provide additional medical evaluations that comply with the requirements of this section if:

- An employee reports medical signs or symptoms that are related to ability to use a respirator;
- A PLHCP, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

Any changes in physical attributes affecting their ability to wear/use the respirator shall be immediately reported to the Risk Management and Safety Office to determine the need for further medical evaluation and fit testing.

Fit Testing

Is required before an employee may use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.

Additional fit testing shall be required whenever the employee reports, the PLHCP, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

Qualitative Fit Testing

The fit test shall be administered using an OSHA-accepted qualitative fit test protocol.

Qualitative fit testing uses the wearers' subjective response to exposure. A noxious chemical (bitrex solution or banana oil) is used to determine the effectiveness of the seal. If an odor is detected during a chemical release, a leak exists.

Positive and Negative Pressure Tests

Positive and negative pressure tests are conducted when the wearer closes off the exhalation or the inhalation valve and either inhales or exhales air to determine if the respirator is leaking.

Positive and negative pressure tests shall also be conducted prior to the qualitative fit test to provide a fast approximation of fit and proper face piece seal. This type of fit test is required before each use.

Cleaning and Storage

Employees are responsible for the cleaning and the storage of their assigned respirator.

All respirators shall be stored in the appropriate respirator storage bag to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the respirator.

Respirator cleaning shall be done using an acceptable sanitizing kit or detergent and hot water. Respirators shall be cleaned and disinfected after each use to maintain the equipment in a sanitary condition.

Maintenance

Respirators that fail an inspection or are otherwise found to be defective will be removed from service to be discarded, repaired or adjusted in accordance with the following procedure:

- Repairs or adjustments to respirators shall be made only by persons trained to perform such operations and shall only use the respirator manufacturer's NIOSH approved parts designed for the respirator.

Respirator Operation and Use

Respirators shall only be used following the respiratory protection safety procedures established in this directive. The operations and use manuals for each type of respirator will be maintained by the employee's supervisor and will be made available to all qualified users.

When there is a change in the work, conditions, the degree of employee exposure or stress that may affect respirator effectiveness, the respirator will be reevaluated for its effectiveness.

Face piece seal protection

Respirators with tight-fitting face pieces shall not be worn by employee's who have:

- Facial hair that comes between the sealing surface of the face piece and the face that interferes with the valve function.
- Any condition that interferes with the face to face piece seal of valve function.

Cartridge Change Schedule

A stock of spare filters and cartridges will be maintained to allow for the immediate change when required or desired by the employee. The employee's supervisor shall be responsible for the change out stock and for providing the employee with the new cartridge.

Cartridges and filters shall be changed based on the most limiting factor below:

- Prior to the expiration date.
- Manufacturer's recommendations for use and environment.
- After each use.
- When requested by the employee.
- When a contaminate odor is detected.

- When restriction to air flow has occurred as evidenced by increased effort by the user to breathe normally.

Directive Surveillance

Directive effectiveness shall be evaluated through regular inspections of each area/situation where respirators are used. The Risk Management and Safety Office shall be responsible for these evaluations.

Recordkeeping

The Risk Management and Safety Office shall be responsible for keeping all the necessary records for this directive.

The following records shall be filed together and shall include:

- Written directive and appendices.
- The Employee Respirator Use Records.
- Medical Evaluation sheet.
- Program surveillance and inspection reports.
- Respirator inspection logs and other maintenance information.
- Respirator training logs.

Employee Respirator Use Record

Each assigned respirator requires an Employee Respirator Use Record. All portions of the form should be filled in and discussed with the employee prior to signing.

The employee shall be trained in all the areas listed on the Use Record prior to the assignment of the respirator.

Appendices:

Appendix A – Fit Test Record

Appendix A – Respirator Fit Test Record

The Maryland-National Capital Park and Planning Commission

Respirator Fit Test Record

Employee: _____ Date: _____

Location / Address: _____

Respirator Selected: _____ Size: _____

Manufacturer: _____

Conditions which could affect respirator fit:

Clean Shaven	<input type="checkbox"/>	Facial Scar	<input type="checkbox"/>
1-2 Day Beard Growth	<input type="checkbox"/>	Dentures Absent	<input type="checkbox"/>
2 + Days Beard Growth	<input type="checkbox"/>	Glasses	<input type="checkbox"/>
Moustache	<input type="checkbox"/>	None	<input type="checkbox"/>

Comments: _____

Fit Checks:

Negative Pressure	Pass	<input type="checkbox"/>	Fail	<input type="checkbox"/>	Not Done	<input type="checkbox"/>
Positive Pressure	Pass	<input type="checkbox"/>	Fail	<input type="checkbox"/>	Not Done	<input type="checkbox"/>

Fit Testing:

Quantitative	<input type="checkbox"/>	Fit Factor:	_____		
Qualitative	<input type="checkbox"/>	Isoamyl Acetate	Bitrex		
		Pass <input type="checkbox"/>	Fail <input type="checkbox"/>	Pass <input type="checkbox"/>	Fail <input type="checkbox"/>

Comments: _____

Employee Signature: _____ Date: _____

Test Conducted By: _____ Date: _____

Instructions: Form completed by Risk Management and Safety Office Staff.

SECTION 5.30 Safety Systems

The Commission has implemented this Directive to define systems such as Hazard Assessments and Job Hazard Analysis (JHA)/Job Safety Analysis (JSA) and other methods for the identification and control of potential or existing hazards at the workplace.

PURPOSE

The purpose of this Directive is to define systems and methods for the identification, evaluation, control and communication of potential and/or existing hazards.

APPLICABILITY

This Directive applies to all Commission personnel, facilities and worksites.

DEFINITIONS

Job Hazard Analysis (JHA)/Job Safety Analysis (JSA) means a systematic process of studying a 'job' (task) to define the activities associated with the job, identify the hazards or potential hazards associated with each sequential activity, and to develop solutions to eliminate, prevent, or reduce, such hazards from causing harm.

JOB SAFETY ANALYSIS (JSA)

General Information

(JHA/JSA is a process utilized in safety and loss control programs. The objective of the JSA is to prevent accidents by improving employee skills and awareness through an organized process. That process involves breaking down a job/task into a series of simple steps. In each of these steps, hazards are identified and documented, following which solutions and recommendations to prevent potential incidents are documented. The details of the analysis must be discussed between supervisors and affected employees prior to the commencement of work. When properly done, JHA's/JSA's effectively refocuses employees on how to perform their duties safely.

JHA/JSA differs from accident investigation. Although some analysis is required during the accident investigation, this is performed after an accident has already occurred. A JHA/JSA can be performed on any occupation and can be done to prevent accidents from occurring. For example, a departmental secretary's position can be analyzed for a safe working environment. In this example, the analysis would determine, among other things:

- Correct workstation height that is appropriate to his or her physical characteristics
- Proper adjustments of the secretary's chair to ensure good posture while working
- Education on Carpal Tunnel Syndrome
- Correct lighting and other environmental conditions in the secretary's office

The purpose of the JHA/JSA is not to change job descriptions or move an individual to another position. Rather, the JSA is used to educate people on the hazards associated with their duties and therefore assist them in preventing accidents from occurring.

Types of Job Analysis

The Commission working environment varies from individual to individual. The Commission employs personnel that work in industrial, office, and service environments. Hazards that exist in these positions can also vary greatly. For example, a painter's occupational hazards are associated with the use of ladders, scaffolds, and hazardous materials (fumes).

The JHA/JSA should cater to the specific job that is being analyzed. The following is a list of different types of Job Analysis.

Note that there is usually no need to perform a separate type of job analysis for different aspects of each job, since all the relevant details can be captured and incorporated into one document.

Posture Analysis

Identifies hazards for employees who:

- Maintain the same posture for long periods of time
- Reach above the shoulder or more than 20 inches away from the body
- Bend at the waist
- Bend the wrist while using tools or other equipment
- Examples of positions that may require this type of analysis
 - ✓ Printing Specialist
 - ✓ Stock Clerk

Force Analysis

Identifies hazards for employees who:

- Lift or lower objects weighing more than 10 pounds
- Use tools that weigh more than 2 pounds on a regular basis
- Push or pull heavy objects
- Pinch objects with fingers or hands
- Examples of positions that may require this type of analysis
 - ✓ Carpenters
 - ✓ Heavy Equipment Mechanics

Frequency Analysis

Identifies hazards for employees who:

- Repeat the same motion several times per minute or faster
- Use the same muscle groups for performing tasks several times per minute

- Repeated bending of the same joints throughout the workday
- Examples of positions that may require this type of analysis
 - ✓ Administrative Aide
 - ✓ Accounting Specialist

General Environmental Analysis

Identifies hazards for employees who:

- Are exposed to hot or cold temperatures
- Must work in poor lighting
- Perform tasks in environments with hazardous materials
- Examples of positions that may require this type of analysis
 - ✓ Pesticide Applicators
 - ✓ HVAC Mechanic

Identifying the Need for a Job Analysis

Although a Job Analysis can be performed on any job, certain factors can determine the need to perform one.

The following guidelines can be used to identify the need to conduct a job analysis:

- A JHA/JSA **must be performed** on any job in which an accident has caused serious injury, or the death of an employee
- A JHA/JSA should be performed for any jobs:
 - ✓ That has produced a disabling injury within the past three years
 - ✓ That demonstrates a trend of major or minor accidents
 - ✓ In which prior accident or hazard prevention procedures have not eliminated the occurrence of accidents
 - ✓ Which have recently changed in a manner that could jeopardize employee safety
- A JHA/JSA may be performed for any newly created positions – especially if the position involves the use of HAZMAT or any other potential for danger.

Procedures for Performing the Job Analysis

Supervisors are responsible for administering all Job Analysis and the Risk Management and Safety Office shall oversee the Program. The JHA/JSA must include completion of a **JHA/JSA Form** as part of its required documentation.

The following steps should be used when performing an analysis:

1. Select the Job
2. Observe the Job
3. Identify Hazards
4. Recommend controls
5. Implement controls

6. Review with employees

Step 1: Select the Job

Identify a need for the JHA using the guidelines.

Recognize the type of JHA to be performed.

Solicit the help of individuals who are experienced and capable.

Select employees who are passionate about their job and have an active interest in their personal safety.

Notify the employee to schedule the JHA.

If necessary, meet with the employee to discuss the JHA process.

Instruct the employee on the purpose of the JHA.

Step 2: Observe the Job and Record

Note: This step shall be documented using JHA worksheet form.

The person performing the JHA may need to physically observe the employee performing his or her normal job duties. Pay close attention to:

- ✓ The working environment
- ✓ Ergonomics in the workplace
- ✓ Equipment or tools that are used to perform tasks
- ✓ The employee's overall attitude
- ✓ Communication with other employees

Using this observation, along with information from interviews, identify and record a sequence of steps that encompass the job. This should contain no more than 12 steps.

If a specific job requires more than 12 steps, that job should be broken down into different tasks, and those tasks analyzed separately.

Step 3: Identify Hazards

Note: This step shall be documented using JHA worksheet form.

Once the job has been observed and the sequence of steps are recorded, then answer the following questions to identify any hazardous conditions as part of the JHA:

Is there a potential for a slip, trip, or fall?

Can the employee be caught in, by, or between objects?

Is there a danger of being struck by an object?

Can the employee hurt himself or herself by pulling, lifting, pushing, or through some other physical movement?

Is the equipment or tools that the employee uses to perform this job in safe working condition?

Is the proper personal protective equipment available?

Are the proper safeguards, shields, and warning labels installed on any applicable equipment?

Does the employee know how to safely operate this equipment (training)?

Are there any environmental conditions that could cause accidents (toxic gases, vapors, dust, mist, fumes, radiation)?

Document these hazards on the JHA form appropriately

Step 4: Recommend (Controls)

After hazards and dangers associated with a particular job are identified, then appropriate solutions can be recommended and implemented.

Look at different ways of performing tasks, and then choose the safest method.

Change the environment that the job is performed in (Ex: Increase the lighting in a work area).

Supplement the job description with safety-oriented procedures (Ex: Include PPE equipment which has been checked before doing the specific task).

Reduce the frequency of job tasks. Statistics show that accidents are more prevalent in tasks that are repetitive.

In some cases, it may be necessary to test recommendations before they are implemented.

Step 5: Implement (Controls)

After hazards associated with the job is identified, then appropriate solutions can be implemented.

Look at different ways of performing tasks, and then choose the safest method.

Engineering Controls

Change the environment that the job is performed in (Ex: Increase the lighting in a work area).

Supplement the job description with safety-oriented procedures (Ex: Include PPE equipment which has been checked before doing the specific task).

Reduce the frequency of job tasks. Statistics show that accidents are more prevalent in tasks that are repetitive.

In some cases, it may be necessary to test recommendations before they are implemented.

Step 6: Follow up on Solutions

The supervisor should keep a copy of the completed JHA form.

If applicable, other employees whose job is to perform similar tasks should be notified of these changes.

If these employees do not understand those changes, then proper training shall be provided to them.

The Risk Management and Safety Office shall maintain these documents for a minimum of one year.

RECORDKEEPING for JOB SAFETY ANALYSIS: JHA Form

Documentation is an important part of performing Job Hazard Analysis. Records must be uniform and consistent so that many people can understand and use this information. Further, having Job Hazard Analysis allows the Risk Management and Safety Office to study trends in hazardous occupations and recommend job description changes as they affect safety.

Completion of the JHA form is necessary for all Job Hazard Analysis. This documentation should be kept on file in the Risk Management and Safety Office for a minimum of one year.

INSPECTIONS, AUDITS and PLAN REVIEWS

Safety audits and inspections function as a monitoring tool that can be used to locate and document existing and potential hazards. They are essential for reducing and avoiding potential risk exposures as well as monitoring compliance with OSHA regulations.

Safety audits and inspections are conducted periodically (at least annually for each facility), to ensure compliance with Commission safety standards as well as other local, state and federal safety and health regulations.

The Risk Management and Safety Office shall establish an inspection process for all facilities to establish a safe environment for our employees and patrons. Additionally, plans specifications for new facilities or modifications to existing facilities may be reviewed by the Risk Management and Safety Office to ensure compliance with local, state and federal safety and health regulations.

All inspection activities shall be appropriately documented and retained in the facility files.

ACCIDENT INVESTIGATION

General Information

Note: The information given in this section primarily pertains to accidents/incidents that **do not involve a motor vehicle**.

Despite our best efforts to control and eliminate hazards, accidents will occur. When an accident occurs, there should be a universal method to investigating it. This is so that people can learn from unsafe acts or conditions that caused the accident to happen.

Once these acts or conditions are identified, then corrective action can be recommended and implemented in the hope of preventing similar accidents in the future.

The extent to which an accident is investigated depends, in part, on the severity of the accident. However, the method of investigation should be uniform. This common method of accident investigation shall be discussed in this section of the Risk Management and Safety Manual.

Persons Responsible for Accident Investigations

All accident investigations will involve the direct supervisor of the employee(s) involved in the accident/incident. Depending on the circumstances, an accident investigation may also involve the Risk Management and Safety Office.

If necessary, emergency personnel are the first contact in an accident. Park Police are the first responders for emergencies on Commission property. The employee involved in the accident should contact his or her departmental supervisor. Finally, the Risk Management and Safety Office shall be notified of the accident. All parties should be notified quickly after an accident has occurred to ensure fast response to that accident.

Emergency personnel are called to protect life and property in the event of an accident. At an accident scene, these persons are primarily in charge and decisions in dispute should be yielded to them. The accident scene should not be disturbed by the Commission until police and/or fire investigators have released the scene back to the Commission. The employee's supervisor will initiate the Commission's accident investigation. The Risk Management and Safety Office is available to assist the supervisor in facilitating this investigation. The Risk Management and Safety Office shall review all accident investigations and make recommendations for preventing them from reoccurrence. The Risk Management and Safety Office shall follow-up on these recommendations, thereby completing the investigation process.

Procedures for Investigation

Note: These instructions shall be given to every supervisor as part of their required safety training.

There are seven (7) systematic steps in performing an accident investigation. These steps must be performed sequentially in order to ensure a thorough investigation. They are as follows:

1. Be Prepared for the Accident
2. Help the Injured
3. Secure and Survey the Scene
4. Gather Evidence and Interview Witnesses
5. Analyze the Evidence
6. Recommend and Implement Changes
7. Follow-up on Those Changes

Step 1: Be Prepared for the Accident

When an accident occurs, fast response is important – especially in an emergency situation. Supervisors should pay attention to the following guidelines:

- Read and understand all of these procedures before you are asked to respond to or investigate an accident. Know what to do in the event of an emergency.
- Build an Accident Response Kit containing the following items:
 - Sterile gloves
 - Basic first aid supplies
 - A tape measure
 - Blank accident reporting and investigation forms
 - Blank paper and an ink pen
 - A copy of the Commission procedures for accident investigation
- Keep your Accident Response Kit in a secure location. Package these items in one container that you can get to quickly when an accident occurs.
- Be familiar with any hazardous or dangerous areas within your building/facility.
- Understand the emergency evacuation floor plan for the areas within your building (Know where the fire extinguishers are for your building and how to use them (for more information on fire extinguisher safety).
- Know the emergency phone numbers associated with the department.

Step 2: Help the Injured

Commission employees and supervisors first response should be to help any injured persons, which includes notification of emergency personnel if necessary. Commission employees have a duty to dial 911 or otherwise notify emergency personnel and assist in directing them to the injured.

This is **NOT** the time to investigate the accident. Follow these tips to facilitate this task:

- Do not panic. It is important for you to think clearly and calmly.
- If necessary, dial 911 and have emergency personnel routed to your exact location. When calling, be prepared to give information such as:
 - The phone number you are dialing from
 - The street address of the accident location
 - The building and area of the accident including the room number
 - The nature of the injured – are they conscious? Are they breathing?
 - Any hazardous materials that may be involved in the accident (such as chemical spills)
- If emergency personnel are notified, stay on the phone line until they arrive. The caller may be asked to give directions if emergency personnel are not sure how to locate the accident site.
- If necessary, ask someone else to stay on the phone line while you facilitate immediate first aid.
- With back or neck injuries, instruct these persons **NOT** to move unless it is absolutely necessary.
- For cuts, if possible, wash the area with clean water and apply pressure with a clean cloth to stop the bleeding.
- For burns, including chemical or heat related burns, hold the burned area under copious amounts of cold running water.

Step 3: Secure and Survey the Scene

This step should be implemented only **after** any injured persons have been assisted. If emergency personnel are in route, and it is not necessary to administer emergency first aid, then you should begin securing the scene.

- Solicit the help of others in the area. Speak directly to these individuals, but in a calm manner.
- If applicable, have one person stand near the elevator on the first floor of the building and hold it open for emergency personnel.
- Have another person go to the street next to the building and alert emergency vehicles of the accident location.
- Any bystanders should be asked to stand clear of the area.
- Look around the accident scene. Be aware of your surroundings.
 - ✓ Are there any things capable of falling on the victims?
 - ✓ Are there any environmental conditions that could put you or others at risk?
 - ✓ Is there equipment or machinery that contributed to the accident still running?
 - ✓ How are the weather, lighting condition, and other environmental conditions?

Step 4: Gather the Evidence and Interview the Witnesses

Once the accident scene is secure, it is time to begin gathering evidence. This is where the accident investigator (supervisor) can expect to use items included in their accident response kit (see step 1 of this section)

If necessary, before moving anything, get a working drawing of the accident scene. If possible, take pictures of the accident scene. Take pictures from different angles. This could help greatly later in the investigation process.

- Observe the accident scene for general conditions. Look for things like:
 - ✓ Broken handrails
 - ✓ Chips in floor tile or a wrinkle in the carpet
 - ✓ Fluid spilled on the floor
 - ✓ Foul smells or odors – chemical or solvent odors

Look at the equipment, furniture, and fixtures in the area where the accident occurred. Particularly pay attention to:

- ✓ Chairs with wheels
 - ✓ Unstable ladders
 - ✓ Missing safety shields and guards
 - ✓ Warning labels that are not legible
 - ✓ Frayed or broken electrical cords
 - ✓ Equipment that looks broken or unsafe to operate
- Observe the person(s) involved in the accident. Are they wearing the proper PPE for the task they were performing when the accident happened?

When interviewing witnesses or people involved in the accident, they will be naturally nervous. This may have been a traumatic experience for them. Speak to them in a calm tone of voice. It is important for them to think clearly so that the interviewer can get accurate information. Follow these guidelines when conducting interviews:

- If there are many bystanders, try to conduct an interview away from these people in a private location.
- Establish a relaxed atmosphere.

- Reassure this person that you are not trying to establish blame for the accident. Rather, just try to get the facts about what happened.
- Ask necessary questions, but do not prolong the interview.
- Be a good listener – do not interrupt witnesses.
- Ask open-ended questions. Try to obtain the “Who, What, Where, and How” of the accident.
- Close the interview on a positive note. Assure the person you are interviewing that the information given will be kept in confidence.
- While interviewing witnesses, take notes. Be sure to get the witness contact information, including a telephone number.

Step 5: Analyze the Evidence

Once all of the evidence is gathered and witnesses have been interviewed, it is necessary to analyze this information in order to recommend and implement changes. The accident investigator may need the assistance of the Risk Management and Safety Office in this step. Use the following information when performing the accident analysis:

- Identify any unsafe acts that may have caused the accident to occur. Unsafe acts are performed by persons and not associated with environmental conditions. Examples include: improper lifting techniques, incorrect use of materials/equipment, not following safety procedures/directions, etc.
- Pay attention to unsafe conditions – both physical and environmental that can contribute to the accident. Examples include: leaky plumbing, sinkholes, faulty wiring, poor lighting, etc.
- Determine if proper training was a factor in the accident.
- Look at carelessness as a possible cause for the accident.
- Find out if a policy or procedural change is needed to prevent the accident from reoccurring.
- Other contributing factors that can cause accidents are:
 - ✓ Weather conditions
 - ✓ Improper lighting
 - ✓ Inoperable or failed warning systems
 - ✓ Poor housekeeping
 - ✓ Availability or non-use of personal protective equipment
 - ✓ Inexperience or lack of understanding when operating equipment
 - ✓ Altered consciousness – use of alcohol or drugs
- Consider that the accident may have more than one of these factors contributing to the cause.

Step 6: Recommend and Implement Changes

Once the accident has been analyzed, corrective action should be initiated as soon as possible. Use the following guidelines for this step of the investigation:

- If the investigator is unsure of what changes to recommend, he or she can contact the Risk Management and Safety Office for suggestions.
- Recommendations should be documented. Use the space provided in the root cause analysis section of the accident investigation form.
- The immediate action should be implemented quickly to remove hazards and unsafe conditions that exist (i.e. “File down the sharp metal on the equipment”).

- Long-range actions should be suggested after the accident is investigated and all of the facts are obtained (i.e. “Train employees to check the equipment for sharp metal edges”).
- Notify other persons of these recommendations so that they will be aware of dangers and hazards that could affect them.
- Notify supervisors of these recommendations to ensure their compliance.

Step 7: Follow-up on Those Changes

- Once immediate or long-term corrective action has been implemented, the investigator should check on these changes within a reasonable time period.
- During safety meetings (see section 6), accidents and corrective action can be reviewed and discussed with applicable employees.
- Contact supervisors and ensure that proper training was provided, if applicable
- Recheck accident scenes that have unsafe environmental conditions for corrective action. (Ex: The broken handrail has been fixed).
- Look at policies and procedures and make sure they have provisions for preventing the accident from reoccurring.

RECORDKEEPING for ACCIDENT INVESTIGATIONS

Documentation is an important part of performing accident investigations. Records must be uniform and consistent in order to understand the cause of an accident and prevent them from happening again. This documentation can also be used to study trends in hazards or unsafe environments. This documentation shall be kept on file in the Risk Management and Safety Office for a minimum of one year.

If there is an injury to a Commission employee, the necessary First Report Of Injury shall be filed with the Commission’s third party administrator.

ROOT CAUSE ANALYSIS FORM

Note: This section may be completed after the evidence is gathered and during the analysis of that evidence (see step 5 for accident investigation).

- Keep any answers in this section concise and simple.
- Unsafe acts and conditions are the primary causes of the accident.
- An unsafe act is something that is done by a person or persons (Ex: Employee holding box knife too close to his other hand while operating the knife).
- An unsafe condition pertains to factors in the environment or area that cause the accident to occur (Area for cutting was too cramped for cutting boxes).
- Contributing factors are unsafe acts or conditions that also add to the accident (Ex: Employee was in a hurry while operating a sharp tool or the box knife blade was dull.).
- The immediate action should be implemented as soon as possible to remove immediate hazards (Ex: Administer first aid to the wound, purchase sharp knife blades, etc.).
- Long-range actions should be suggested after the accident is investigated and all of the facts are obtained (Ex: Train employee on the dangers of operating a sharp object in tight quarters. Train employee on the importance of working with sharp tools).

Other Instructions

- Once the root cause section is completed, fax the form to the Risk Management and Safety Office (301-454-16 81/82)
- The Risk Management and Safety Office shall review every accident reported.
- The Risk Management and Safety Office shall maintain these records for a minimum of one year.
- The Risk Management and Safety Office shall tabulate fields reported on a yearly basis.

ACCIDENT ANALYSIS

The Risk Management and Safety Office will analyze data on injuries and illnesses within the Commission. Relevant findings and statistics shall be distributed periodically to Commission personnel.

Some hazards may exist that have not resulted in a personal injury, accident or near miss. In such cases, the employee or immediate supervisor should be alert for such hazards and correct any problems. If assistance is necessary, contact the Risk Management and Safety Office.

SAFETY COMMITTEES

The Commission shall establish a safety committee in each county, of which Risk Management and Safety Office staff shall be members. Department Heads shall designate the chair of each committee. The chair shall ensure that the committee consists of volunteer members representing a cross section of each County's activities. The safety committee is responsible for assisting with departmental safety and training and providing ideas to Department Heads on ways for improving and sustaining the Commission's loss control efforts. The safety committee may provide incentives and recognition for notable contributions to the area of safety awareness.

SAFETY MEETINGS (Tool Box Talks)

General Information

Good communication is a key ingredient in the success of any organization. When people work together and share ideas, the results are better production, more efficiency in the workplace, and effective job performance. This concept is true for safety-related issues as well. When employees communicate with each other on hazards in the workplace, this results in the prevention of accidents. The safety meeting is a way for employees to regularly communicate on safety topics.

Persons Responsible for Safety Meetings (Tools Box Talks)

Department supervisors typically facilitate safety meetings. The Risk Management and Safety Office shall train supervisors on conducting Safety Meetings. Specific responsibilities for the supervisors regarding safety meetings are:

- Preparation of the meeting, which may include topic selection.
- Notifying attendees of the meeting.
- Proper safety meeting documentation (handouts, video tapes, etc)
- Documentation of the safety meeting, particularly sign in sheets with original signatures.

Department Heads should be aware of these meetings and ensure their attendance in accordance with procedures listed in this section. Documentation of all safety meetings shall be maintained by each facility. The Risk Management and Safety Office shall review all safety meeting documentation.

Types of Safety Meetings

Safety meeting topics should be related to the jobs of the persons who attend the meeting. Depending on the scope of a particular group of employees, the procedure for conducting a Safety Meeting can vary.

Safety Meetings for High-Risk Jobs

These meetings are for persons whose employment involves any of the following:

- Regular interaction with power machinery or hand tools
- The use of hazardous or flammable materials
- The use of hazardous chemicals and materials

Safety Meeting topics for high-risk jobs may include:

- Hazardous Materials Handling and Storage
- Accident Prevention
- Personal Protective Equipment
- Pesticide Safety
- Hand and Power Tool Safety
- Manufacturers Safety Data Sheets (MSDS)
- Review of Safety Procedures Specific to the Department
- Electrical Safety for Industrial Equipment such as heavy equipment operation

Procedures for Conducting Safety Meetings

Note: These instructions shall be given to every trade supervisor as part of their required safety training.

There are three steps to performing high-risk safety meetings:

1. Prepare for the meeting
2. Conduct the meeting
3. Documentation for the meeting

Step 1: Preparation for the High-Risk Safety Meeting

- The supervisor or other departmental high-risk employees chooses the meeting topic.
- Ask for suggestions from employees for meeting topics.
- Handouts, videos, and any other materials needed to facilitate the meeting are prepared, if necessary.
- The supervisor notifies and schedules the meeting for the department.

Step 2: Conducting the High-Risk Safety Meeting

- All in attendance at the meeting must sign-in.

- The supervisor or designee begins the meeting by discussing any accidents that may have occurred since the last safety meeting.
- Any videos for the meeting are viewed or handouts related to the meeting topic are discussed.
- Allow a short time for discussion, questions, and answers from those in attendance.

Step 3: Documentation for the High-Risk Safety Meeting

- Original signatures from those in attendance are required.
- The attendance sheet shall be kept in a departmental safety-meeting file.

Recordkeeping for Safety Meetings

Documentation is an important part of conducting safety meetings. Records must be uniform and consistent in order to facilitate training, ensure quality control, and study trends in hazards or unsafe environments.

Appendices:

Appendix A – Root Cause Analysis Form

Appendix B – Job Hazard Analysis Form

Appendix A- Root Cause Analysis Form

Root Causation Analysis

(mark 'yes' or 'no' for all **applicable** questions, completing Comments and Recommended Action portions when marking yes)

Part 1 Equipment Was equipment/tools/materials a contributing factor? <input type="checkbox"/> yes <input type="checkbox"/> no, proceed to Part 2			
Mark as Applicable	Causal Factors	Comments	Recommended Action
<input type="checkbox"/> yes <input type="checkbox"/> no	1.1 Did equipment/tool <u>defects</u> contribute? If no, go to 1.2.		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.1.1 Was there an equipment/tool inspection process?		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.1.2 Was the inspection process completed as required?		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.2 Was the <u>correct</u> equipment/tool/material utilized? If no, go to 1.3. If yes, go to 1.6.		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.3 Was the <u>correct</u> equipment/tool/material <u>readily available</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.4 Did the employee <u>know</u> where to obtain the correct equipment/tool/material?		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.5 Was <u>substitute</u> equipment/tools/material <u>used</u> in place of correct ones?		
<input type="checkbox"/> yes <input type="checkbox"/> no	1.6 List other equipment/tool/material causal factors.		
Part 2 Work Environment Was the location of equipment/material/employee(s) a contributing factor? <input type="checkbox"/> yes <input type="checkbox"/> no, proceed to Part 3			
<input type="checkbox"/> yes <input type="checkbox"/> no	2.1 Did the location/position of equipment/material/employees contribute to the incident?		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.2 Was the hazardous scenario recognized by the employee?		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.3 Was the employee supposed to be in the vicinity of the equipment/material?		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.4 Was the hazardous scenario visible to the employee?		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.5 Was there sufficient space to conduct work activities?		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.6 Were there any contributing environmental conditions? (noise levels, temperature, illumination, ventilation)		
<input type="checkbox"/> yes <input type="checkbox"/> no	2.7 List other work environment causal factors.		
Part 3 Employee Were the work activities conducted by the employee a contributing factor? <input type="checkbox"/> yes <input type="checkbox"/> no, proceed to Part 4			
<input type="checkbox"/> yes <input type="checkbox"/> no	3.1 Was there a written task/risk assessment or known rule for this work? If no, go to 3.2.		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.1.1 If yes, did this assessment/rule <u>anticipate</u> the incident?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.1.2 If yes, did the employee <u>know</u> the proper procedure?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.1.3 If yes, did the employee <u>deviate</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.2 Was the employee mentally and physically capable of performing the work?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.3 Was there a <u>lack</u> of required PPE utilization? If no, go to 4.1		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.3.1 If yes, was appropriate PPE <u>available</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.3.2 If yes, did the employee <u>know</u> the PPE was required?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.3.3 If yes, did the employee <u>know</u> how to use it?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.4 Was available PPE <u>used properly</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.5 Was the PPE <u>adequate</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	3.5 List other employee causal factors.		
Part 4 Supervision Was the supervisory system a contributing factor? <input type="checkbox"/> yes <input type="checkbox"/> no, then the Root Analysis is completed.			
<input type="checkbox"/> yes <input type="checkbox"/> no	4.1 Was there a failure by supervision to <u>detect</u> a hazardous condition, deviation from safety policy or infrequently performed task?		
<input type="checkbox"/> yes <input type="checkbox"/> no	4.2 Was there a failure by supervision to <u>take corrective action</u> for a <u>known</u> hazardous condition, deviation from safety policy or infrequently performed task?		
<input type="checkbox"/> yes <input type="checkbox"/> no	4.3 Was supervisory <u>responsibility</u> for accident detection and prevention <u>adequately defined and understood</u> ?		
<input type="checkbox"/> yes <input type="checkbox"/> no	4.4 Was supervision <u>adequately trained</u> to fulfill assigned responsibility for accident detection and prevention?		
<input type="checkbox"/> yes <input type="checkbox"/> no	4.5 List other management/supervisory casual factors.		

Sample recommended action topics include, but are not limited to: re-training or new training, new/more equipment, new processes, responsibility assignments, re-do or new risk assessments, staffing sizes, work assignment loads, etc. Break the topic down into action items you feel will correct this incident from recurrence.

Appendix B – Job Hazard Analysis Form

See next page:

SECTION 5.31 Safety Training

The Commission has implemented this Directive to determine the safety training needs of its employees. All safety training completed by Commission employees complies with Title 29 Code of Federal Regulation (CFR) §1910 and §1926.21, Subpart C Safety Training and Education.

PURPOSE

The purpose of this Directive is to define the safety training needs, systems and methods for delivering safety and health training to Commission employees.

APPLICABILITY

This Directive applies to all Commission employees.

TRAINING REQUIREMENTS

General

The Risk Management and Safety Office will schedule training sessions throughout the year to cover the training requirements listed in the training outline.

Training materials will vary based upon regulatory requirements, taking into consideration the specific needs of each group.

Acceptable methods of training include verbal instruction, classroom lectures, use of video presentations, hands-on, computer-based and/or Internet-based interactive training.

All training activities shall be appropriately documented and retained.

The Risk Management and Safety Office is responsible for evaluating each position in the Commission to determine the level of safety training appropriate for the position. A safety-training outline shall be developed to reflect Commission wide training goals.

New Employee Orientation

Every employee shall attend safety orientation before being assigned to his or her permanent work assignment.

All career and contract term employees shall receive the Commission's standard new employee safety orientation.

Site-specific Orientation

This orientation is in addition to an initial safety orientation. An orientation session with persons upon their initial assignment based upon site-specific requirements. This orientation shall include site requirements, regulatory requirements and other information that apply uniquely to the workplace.

Examples of site-specific orientation include:

- Emergency Action Plans
- Fire Safety
- Hazard Communication and Safety Data Sheet review

Safety Training

The Risk Management and Safety Office shall conduct regularly scheduled safety training sessions. The safety training sessions will be held in each county. The sessions will provide safety training for employees on various subjects to meet OSHA and MOSH safety training requirements and shall address known hazards of their job.

Weekly Safety Meetings (Tool-box Talks)

Employees shall meet weekly, to review a relevant safety topic/s. Documentation of this process shall be obtained and retained. The Risk Management and Safety Office can assist by providing a link to safety-meeting topics and materials. Managers will receive the information and shall be responsible for ensuring safety meetings are conducted.

Supervisor Safety Training

The Risk Management and Safety Office shall conduct relevant classes on Occupational Safety and Health Standards for Managers and Supervisors.

LEVELS of SAFETY TRAINING

Basic Safety Training:

This level of safety training is provided to all Commission employees who hold administrative and office job classifications. This level of safety education consists of two (2) to three (3) hours of training in the subjects of Bloodborne Pathogens, Emergency Preparedness, Fire Prevention and Hazard Communication.

General Safety Training

This level of safety training is provided to all Commission employees who hold field and trades type job classifications. This level of safety education consists of training in the subjects of Bloodborne Pathogens, Emergency Preparedness, Fire Prevention, Hazard Communication, Ladder Safety, Personal Protective Equipment and other topics as deemed necessary.

Specialty Safety Training

This level of safety training is provided to Commission employees who are exposed to specific hazards as a result of their job duties. These specialty safety classes are designed to educate the employees about specific hazards including but not limited to Aerial Platforms, Confined Space Entry, Forklifts, Electrical Safety, Lockout / Tag-out, Respiratory Protection and Welding, Cutting and Brazing.

ADDITIONAL SAFETY TRAINING

The Risk Management and Safety Office is available to provide training on specific topics of interest. Managers and Supervisors can contact our office with their specific request.

RECORDKEEPING

Written records of all safety training, shall be maintained by the Training Office in each County. The Risk Management and Safety Office will also maintain certain training records

The Commission's safety training records shall include the following information:

- Class or Topic
- Instructor
- Date
- Student name
- Signature
- Work location or Facility
- Division / Region

Appendices:

Appendix A – Safety and Health Training Sign-in Sheet

SECTION 5.32 Scaffolding

The Commission has implemented this Directive for the use of scaffolds and complies with Title 29 Code of Federal Regulations (CFR) §1926 Subpart L (Scaffolds), and ANSI guidelines as referenced.

PURPOSE

The purpose of this Directive is to define the procedures and standards for the safe erection, use and dismantling of scaffold systems.

APPLICABILITY

This Directive applies to all Commission work sites whereby scaffolding is utilized.

DEFINITIONS

Competent Person means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to personnel, and who has authorization to take prompt corrective measures to eliminate them.

Platform and Work Platform means a work surface elevated above lower levels. Platforms can be constructed using individual wood planks, fabricated planks, fabricated decks, and fabricated platforms.

Qualified Person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

Rated Load means the manufacturers' specified maximum load to be lifted by the hoist or to be applied to a scaffold or scaffold component.

Scaffold, Scaffolding and Scaffold Assembly means any temporary elevated platform (supported or suspended) and supporting structure (including points of anchorage) used for supporting personnel or materials or both.

Scaffold User means a person who uses a scaffold assembly to gain access to an elevated position in order to perform their work.

Scaffold Builder means a competent person who is trained to erect, modify, repair, and dismantle scaffold assemblies.

REQUIREMENTS

General

Scaffolds shall be erected, used modified, and dismantled in accordance with the requirements of Federal and State Regulatory Standards, along with this policy. These requirements also apply to contracted parties.

When scaffold assemblies are no longer required they shall be dismantled and safely stored/secured.

The use of scaffold assemblies constructed by the Commission is reserved for the sole use of Commission employees.

Qualified and Competent persons are authorized to oversee the construction, modification, and dismantling of scaffolds.

Only employees who are trained and designated as Scaffold Users by a Qualified or Competent person may enter onto scaffold assemblies, except for stand-alone scaffold stairways.

Persons working inside the confines of a completed scaffold are not required to wear fall protection equipment unless otherwise specified.

Scaffold builders are required to wear fall protection equipment when the scaffold erection reaches a height of 6 feet or more.

Designing and Building Scaffolds

Only a Qualified Person shall design scaffold systems.

Pole scaffolds over sixty (60) feet in height shall be designed by a Registered Professional Engineer and shall be constructed and loaded in accordance with that design.

Tube and coupler or fabricated frame scaffolds over one hundred and twenty-five (125) feet in height shall be designed by a Registered Professional Engineer and shall be constructed and loaded in accordance with that design.

A designated competent person shall direct the erection, repair and dismantling of scaffolding systems.

Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports as follows:

Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) shall be installed so that the space between adjacent units and the space between the platform and the uprights is no more than 1 inch (2.5 cm) wide, except where the employer can demonstrate that a wider space is necessary (for example, to fit around uprights when side brackets are used to extend the width of the platform).

Where the employer makes the demonstration noted in the above paragraph, the platform shall be planked or decked as fully as possible and the remaining open space between the platform and the uprights shall not exceed 9 1/2 inches (24.1 cm).

Exception: The requirement to provide full planking or decking does not apply to platforms used solely as walkways or solely by employees performing scaffold erection or dismantling. In these situations, only the planking that the employer establishes is necessary to provide safe working conditions is required.

A competent person shall be at the physical location where scaffold assemblies are under construction, being modified or being dismantled.

Scaffold Builders and Users

Persons assigned as scaffold builders shall be trained to:

- Understand and recognize the nature of scaffold hazards
- Apply the correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question, as applicable
- Know the design criteria, maximum intended load-carrying capacity and intended use of the scaffold
- Know how to apply fall prevention techniques

Scaffold builders shall work under the direct supervision of a competent person as defined by this document.

Scaffold Builders and Users who are assigned to perform work on scaffold assemblies shall successfully pass a training session as designated in the Training section of this Directive.

TRAINING

Scaffold Users

Scaffold users shall be trained by a Qualified or Competent person and/or agency to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following areas, as applicable:

- Recognition of known hazards
- Correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used (see Fall Protection Directive)
- Maximum intended load and load-carrying capacities of the scaffold(s) used
- All other pertinent information associated with this Directive

Scaffold Builders and Inspectors

Scaffold Builders and Inspectors shall be trained by a competent person to recognize any hazards associated with the work being conducted.

The training shall include the following areas, as applicable:

- Nature of scaffold hazards
- Correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold(s) used

- Design criteria, maximum intended load-carrying capacity and intended use of the scaffold(s)
- All other pertinent information associated with this policy manual section

Refresher Training

Any Scaffold Builder, Inspector or User who displays a lack of skill or understanding for conducting their work safely shall be retrained until such skill/understanding is observed.

Retraining shall include the following areas, at a minimum:

- Any changes at the worksite that have not been previously trained
- Any changes in the type of scaffold, fall protection, falling object protection or other equipment have not been previously trained
- Any area of skill or understanding that is not being proficiently displayed

INSPECTIONS

Daily Inspection

Competent Persons are responsible for visually inspecting scaffolds and work platforms for defects and damage prior to use each day. If defects or damage are noted or discovered, work shall stop, and the immediate supervisor shall be notified and work shall not commence until corrective action has been taken.

These inspections shall be documented on an inspection tag attached to the scaffold assembly or a form that is retained.

This inspection shall include the following information:

- Name of the person inspecting scaffold
- Name of Users
- Date inspected
- Items inspected shall be documented appropriately by comment (on the tag) or by initialing an inspection checklist

These tags or completed inspection forms shall be retained for a minimum of three (3) months, after the scaffolding is dismantled.

Competent Person Inspection

Upon the completion of a scaffold assembly a Competent Person is responsible for conducting an inspection to verify the condition of the assembly.

Scaffold Inspection Tags

Because not all scaffolds are constructed to a 100% complete state, a scaffold tagging procedure as defined in this document shall be used to identify the condition of a scaffold assembly.

During the construction phase of a scaffold assembly a “Red” Scaffold tag shall be affixed to the assembly and remain in place until a final inspection has been conducted.

Scaffold tags shall be in use while scaffolds are being erected, modified, used and dismantled. Only Scaffold Builders are permitted to be on a scaffold with a Red Tag (Danger, Do Not Use Scaffold).

Green Tag

A Green tag shall be used to indicate a scaffold is complete and ready for use.

This tag authorizes personnel to use the scaffold without fall protection equipment while working within the confines of the work platform. The front of this card has instructions regarding the inspection of scaffolds by competent persons and users. There is a space for the competent person to add additional instructions. The reverse side of the tag is to be used to document the daily competent person inspection. Upon completion of the inspection the competent person shall sign and date the tag. If conditions are such that the scaffold is not useable without fall protection, the tag shall be removed and replaced with a red or yellow scaffold tag.

Yellow Tag

A yellow tag indicates a scaffold is not complete.

The yellow tag contains a brief description of the incomplete part of the scaffold, known hazards such as but not limited to (missing hand rails, hot steam mechanical lines), and the type of additional protective measures required.

The competent person enters this information. The reverse side of the card is to be used to document the daily competent person inspection. If conditions are such that the scaffold is not useable with fall protection, the tag shall be removed and replaced with a red scaffold tag.

Red Tag

A red tag indicates a scaffold is not safe to use.

Red scaffold tags shall be affixed to scaffold assemblies upon commencement of their construction and until they are completed and ready for use. Upon completion, a yellow or green scaffold tag shall replace the red tag. During disassembly, a red tag shall replace the green or yellow tag.

ACCESS

Access shall be provided to scaffold platforms when they are more than nineteen (19) inches above or below a point of access. Cross braces shall not be used for access.

Acceptable access includes:

- Portable ladder
- Hook-on ladder
- Attachable ladder
- Stair tower
- Stairway-type ladder
- Ladder stand

- Ramp
- Walkway
- Integral prefabricated scaffold access or direct access from another scaffold
- Structure
- Personnel hoist

A safe means of access shall be provided for personnel erecting and dismantling a scaffold where the provision of safe access is feasible and does not create a greater hazard as determined by a competent person. This decision shall be based upon site conditions and the type of scaffold being erected or dismantled.

Hook on type ladders shall be installed as soon as scaffold erection has progressed to a point that permits safe installation and use.

When erecting or dismantling only tubular welded frame scaffolds, (end) frames, with horizontal members that are parallel, level and are not more than 22 inches apart vertically may be used as climbing devices for access, provided they are erected in a manner that creates a usable ladder and provides good hand hold and foot space.

WORKING on SCAFFOLD ASSEMBLIES

Scaffolds shall not be loaded in excess of their maximum intended loads or rated capacities whichever is less.

Any part of a scaffold damaged or weakened to a point where the strength is less than required shall be taken out of service until repaired, replaced or braced to meet requirements.

Employees shall not be on scaffolds while they are moved horizontally except:

- When designed by a registered engineer specifically for such movement; OR
- Provisions for mobile scaffolds are followed (OSHA 29 CFR 1926.452 (w))

Employees shall not be permitted to work on scaffolds covered with snow, ice or other slippery material except as necessary for removal of such materials. Under these circumstances slip resistant footwear, a fall protection system/s and other precautions shall be taken, to ensure personnel do not fall from the scaffold assembly.

Protection from falling objects such as tools, equipment, materials and debris is required for personnel working on scaffolds and work platforms. Protection includes installation of toe boards, screens, guardrail systems, debris nets, catch platforms, deflectors and canopies. Heavy, massive and large objects shall be placed away from edges and secured in place to prevent accidental falling.

The area below scaffolds shall be barricaded to protect personnel working below from falling objects.

Employees shall not be permitted to work on scaffolds during storms, and high winds. Windscreens shall not be used unless scaffolds are designed to withstand wind loads and the load of the windscreen itself.

Employees shall not be permitted to work on scaffold assemblies when electrical storms are visible and in near proximity.

Debris shall not be allowed to accumulate on work platforms.

Barrels, boxes and other inappropriate devices shall not be used to increase the working level height of personnel on any type of scaffold.

Ladders may be used only on large area scaffolds where the following criteria has been satisfied:

- When the ladder is placed against a structure that is not part of the scaffold, the scaffold shall be secured against the sideways thrust exerted by the ladder
- The platform units shall be secured to the scaffold to prevent their movement
- The ladder legs shall be on the same platform or other means shall be provided to stabilize the ladder against unequal platform deflection
- The ladder legs shall be secured to prevent them from slipping or being pushed off platforms
- There is no potential of falling off the scaffold assembly
- The ladder cannot cause deflection of the platform to exceed 1/60th of the supported length of the platform

ELECTRICAL LINES and HAZARDS

All electrical lines shall be treated as ‘live’ unless proven otherwise.

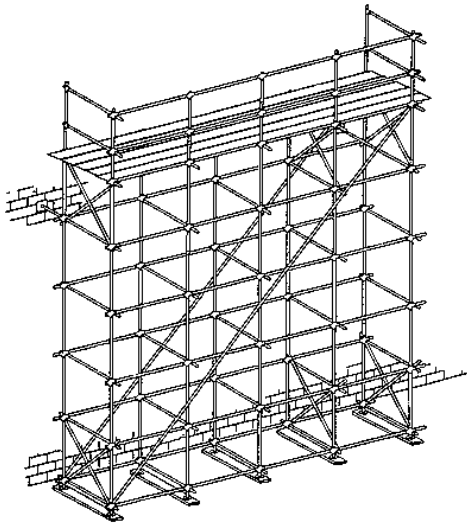
Clearance between scaffolds and electrical power lines during erection, use and dismantling shall be as follows:

Insulated Lines Voltage Minimum Distance Alternatives

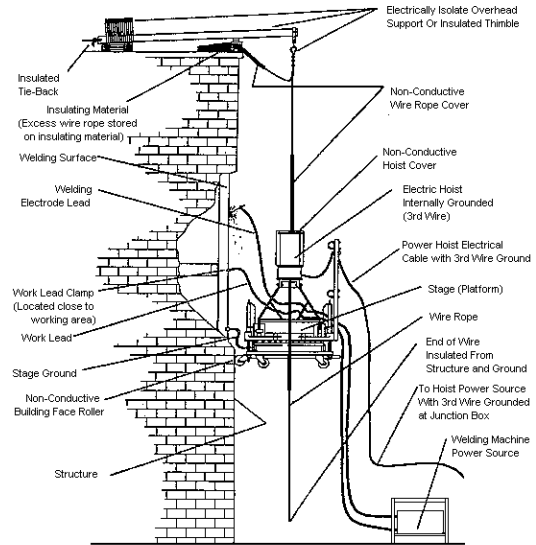
Insulated Lines Voltage	Minimum Distance	Alternatives
Less than 300 volts	3 Feet	
300 Volts to 50 kv	10 Feet	
More than 50 kv	10 feet plus 0.4 inches for each 1 kv over 50 kv	2 times the length of the line insulator, but never less than 10 feet
Uninsulated Lines Voltage	Minimum Distance	
Less than 50 kv	10 Feet and no contact can be made during material handling operations	
More than 50 kv	10 Feet plus 0.4 inches for each 1 kv over 50 kv	

Exception is granted to these requirements when the utility operator or electrical system operator has de-energized the systems, relocated the lines, or installed protective covering to prevent accidental contact with the lines.

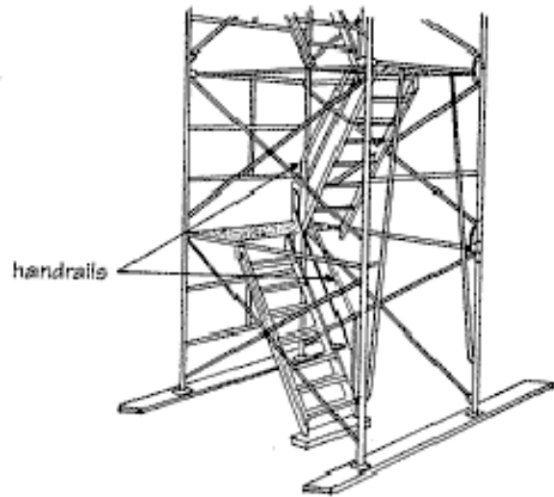
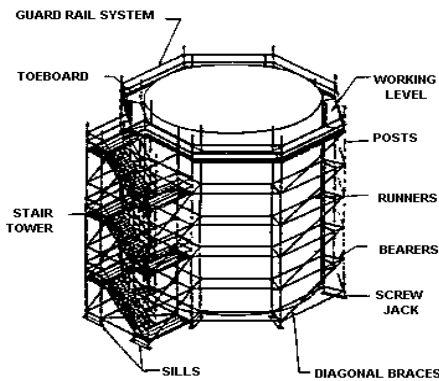
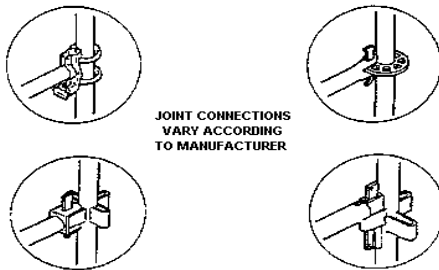
BRACING - TUBE & COUPLER SCAFFOLDS



SUSPENDED SCAFFOLD PLATFORM WELDING PRECAUTIONS

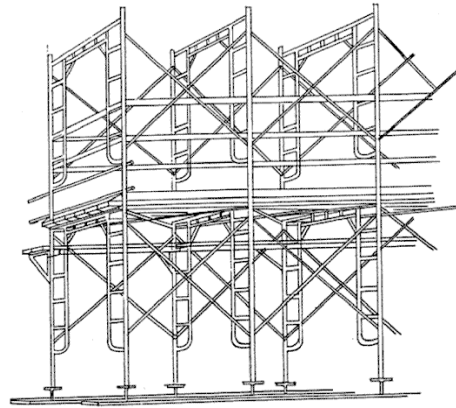
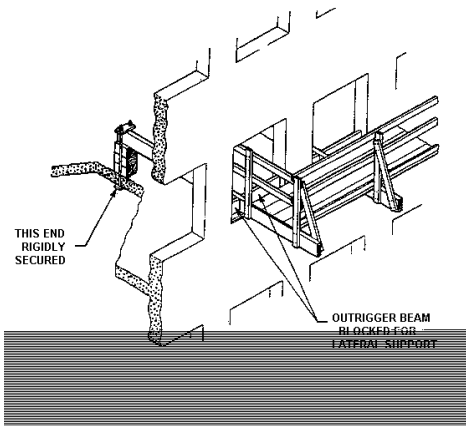


SYSTEM SCAFFOLD

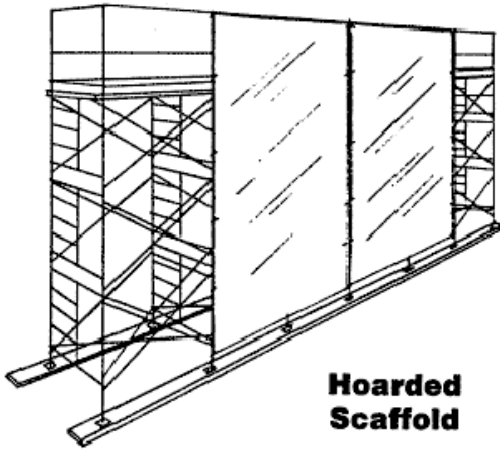


Stairway Platforms

OUTRIGGER SCAFFOLD

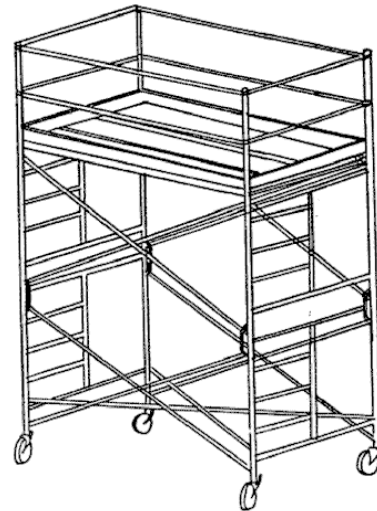


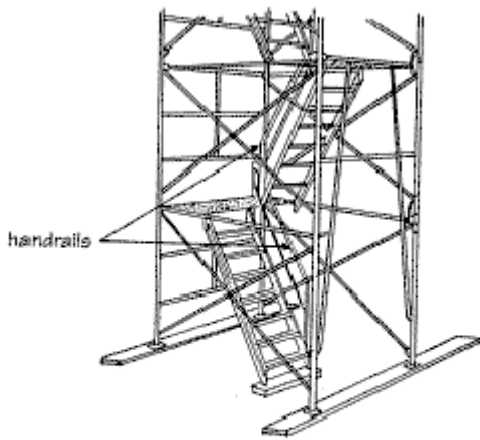
**Walk-Through
(Masonry)
Scaffold**



**Hoarded
Scaffold**

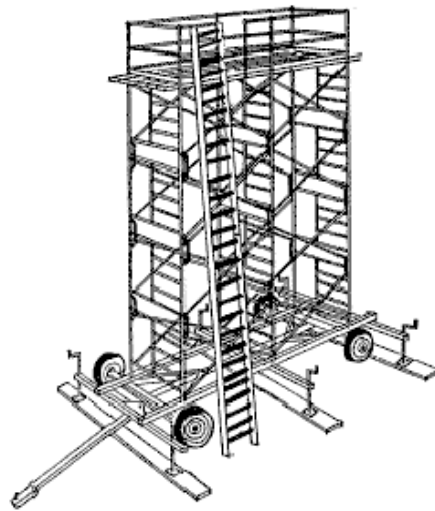
**Rolling
Scaffold**





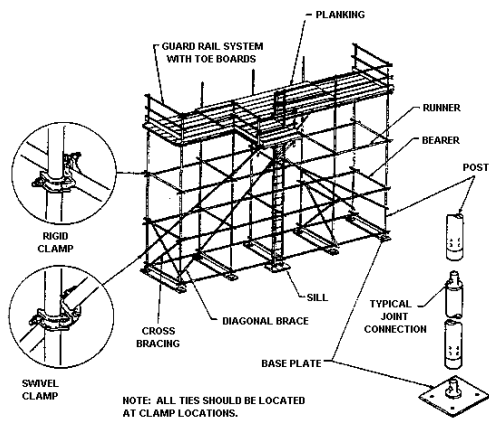
handrails

Stairway Platforms

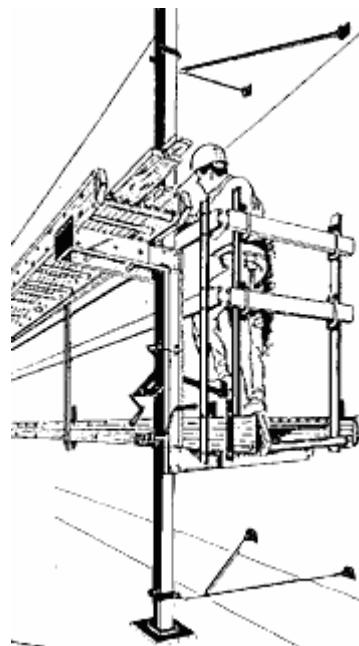


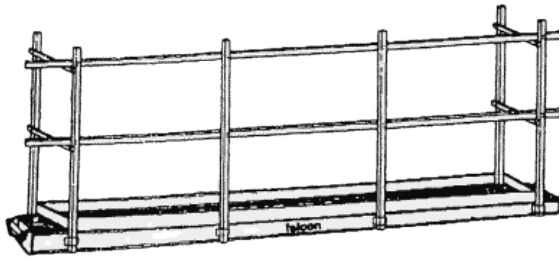
Farm Wagon Type Scaffold

TUBE and COUPLER SCAFFOLD

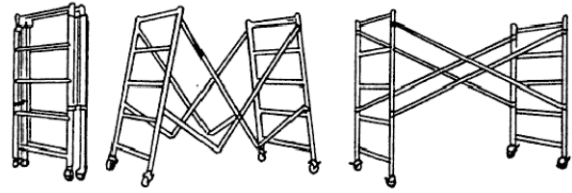


NOTE: ALL TIES SHOULD BE LOCATED AT CLAMP LOCATIONS.

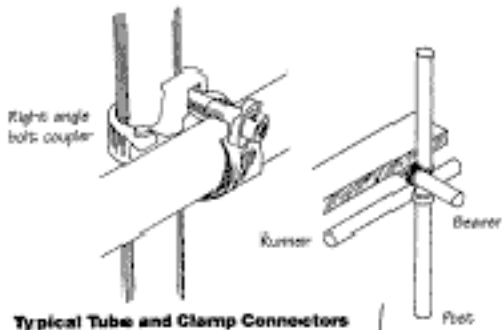




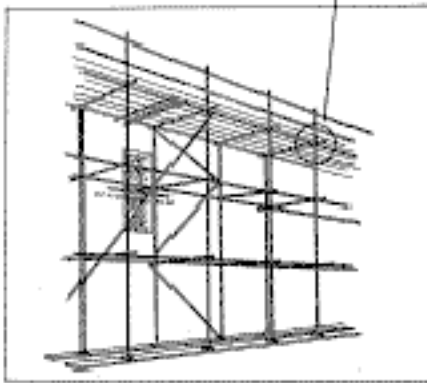
Three Sided Scaffold - Window



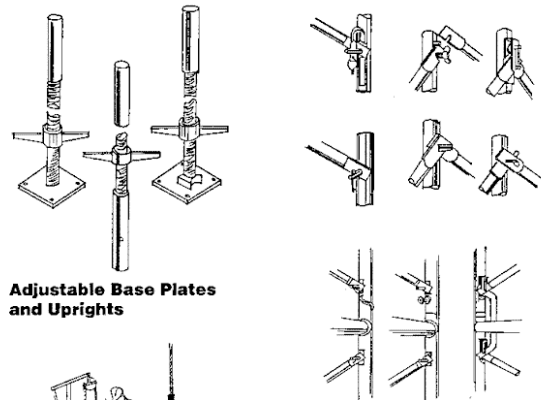
Fold-up Scaffold



Typical Tube and Clamp Connectors

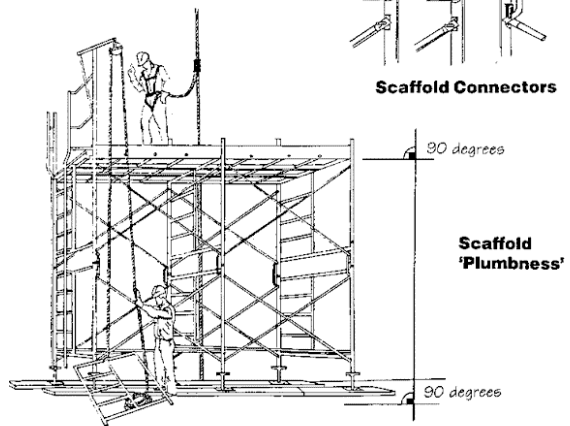


Tube and Clamp Scaffold



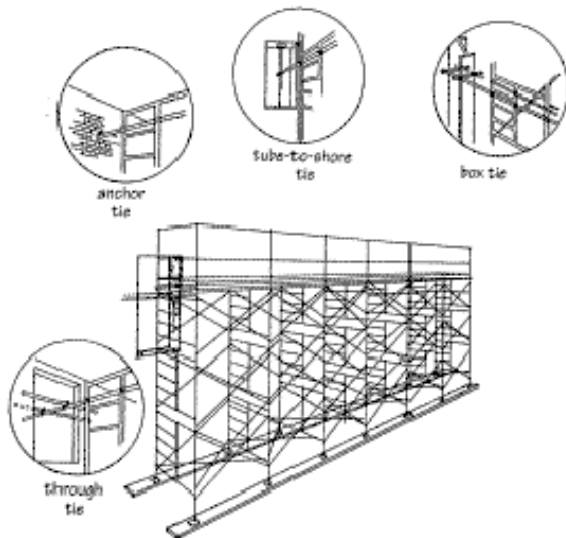
Adjustable Base Plates and Uprights

Scaffold Connectors

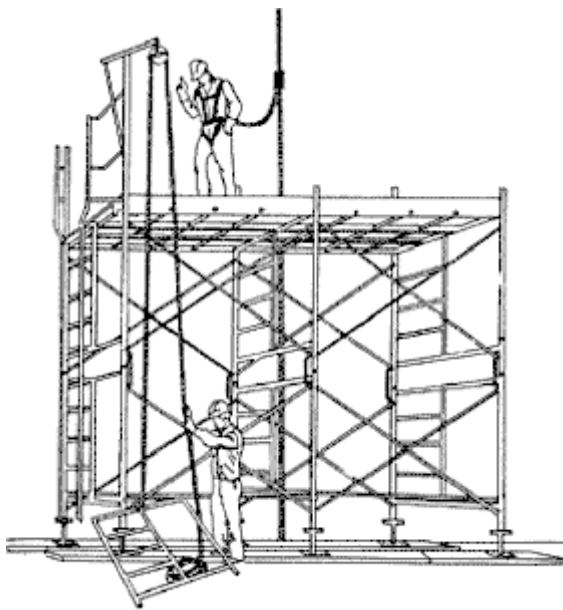


Scaffold 'Plumbness'

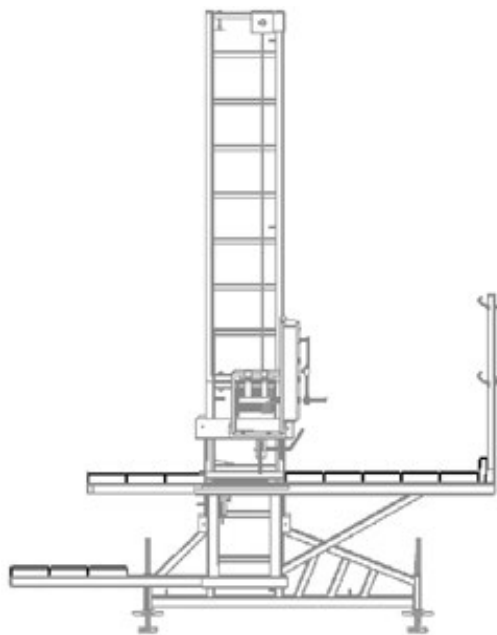
Typical Tie-Backs



ROLLING SCAFFOLDS



Tower Scaffold

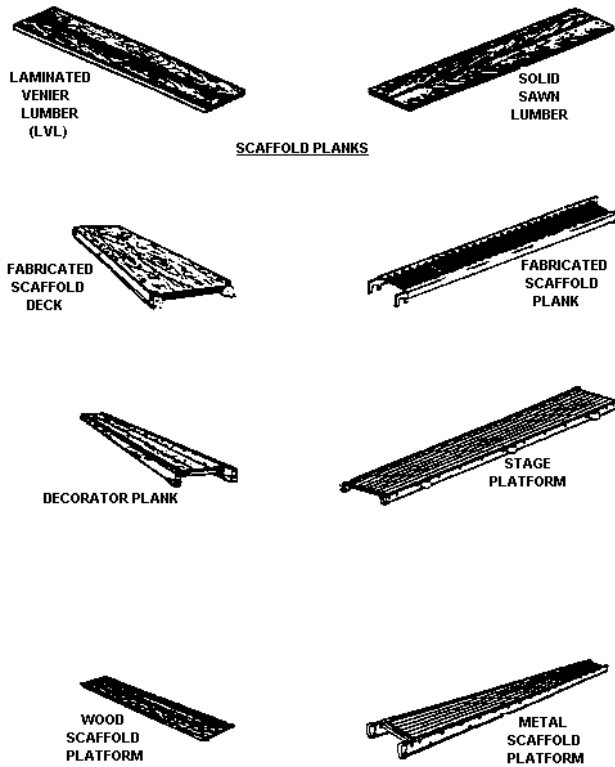




SCAFFOLD DECKS
With Hatch and Ladder

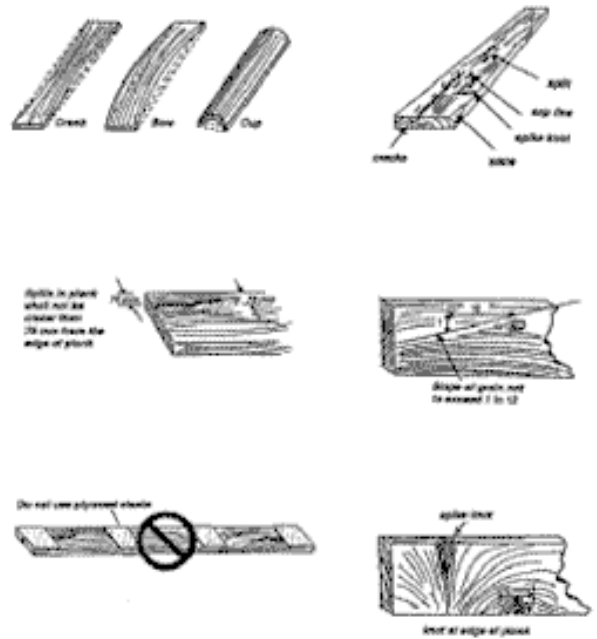


SCAFFOLDING WORK SURFACES

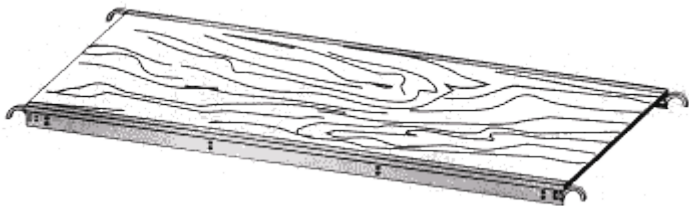


SCAFFOLD PLANKS

Defects

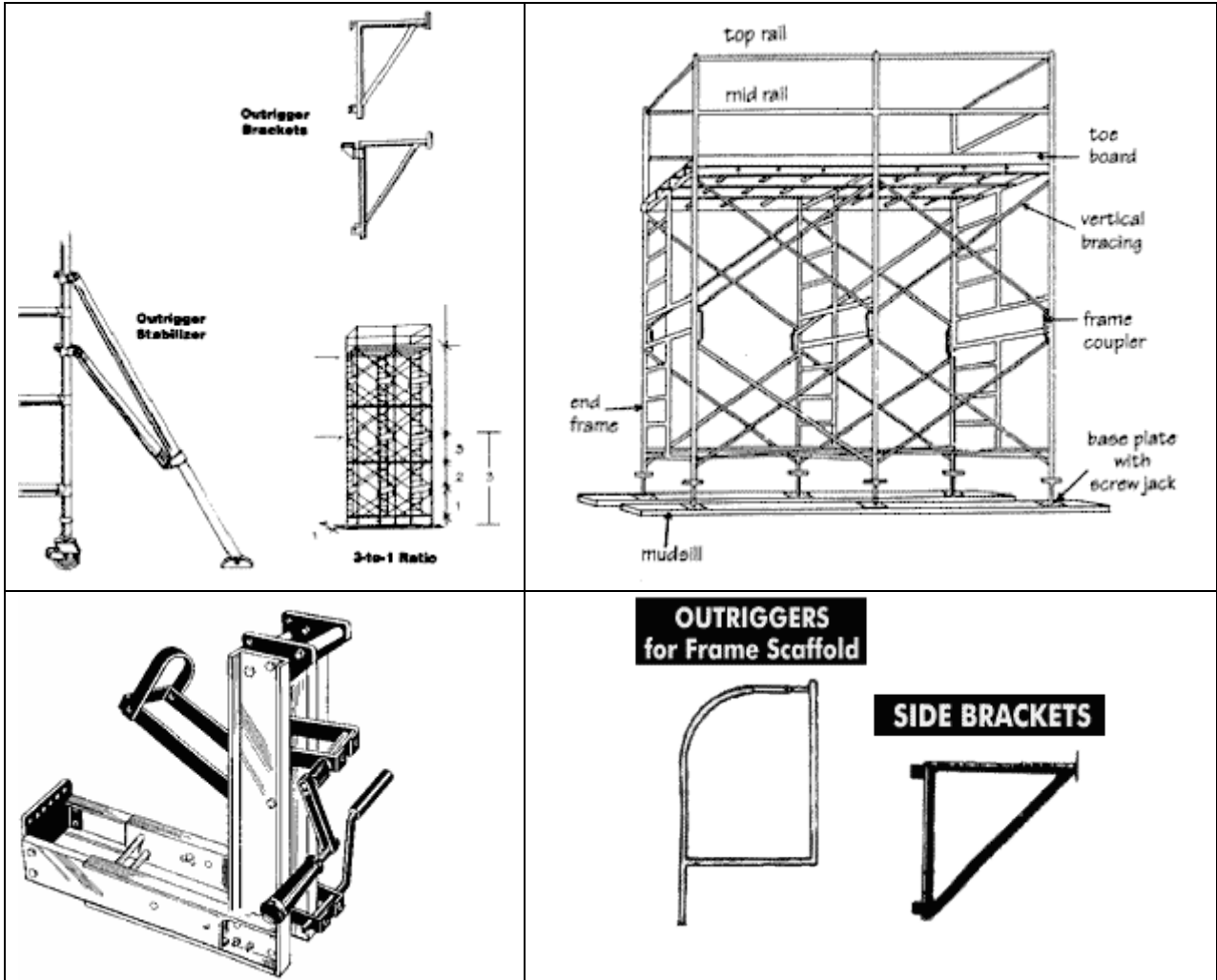


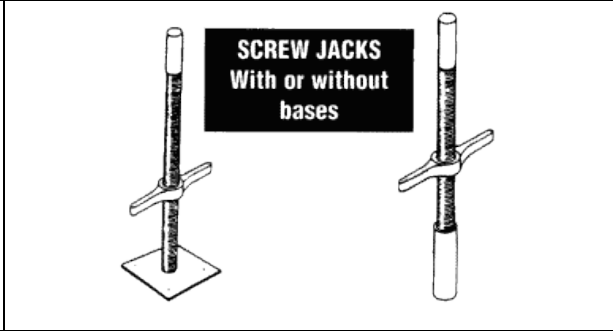
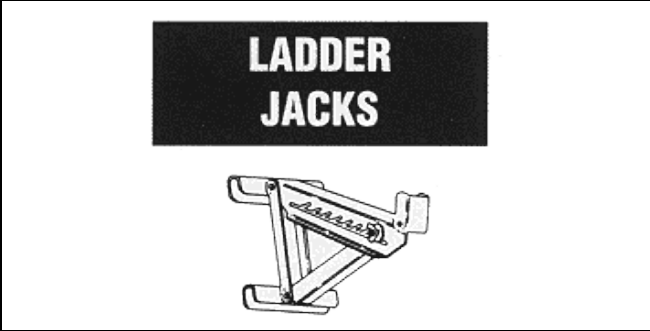
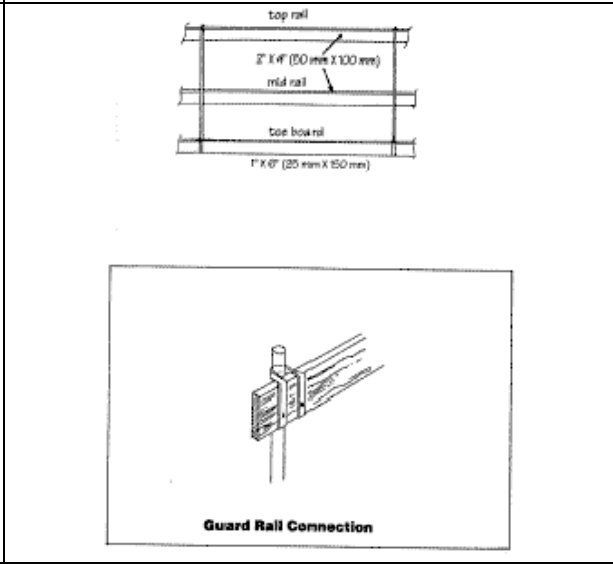
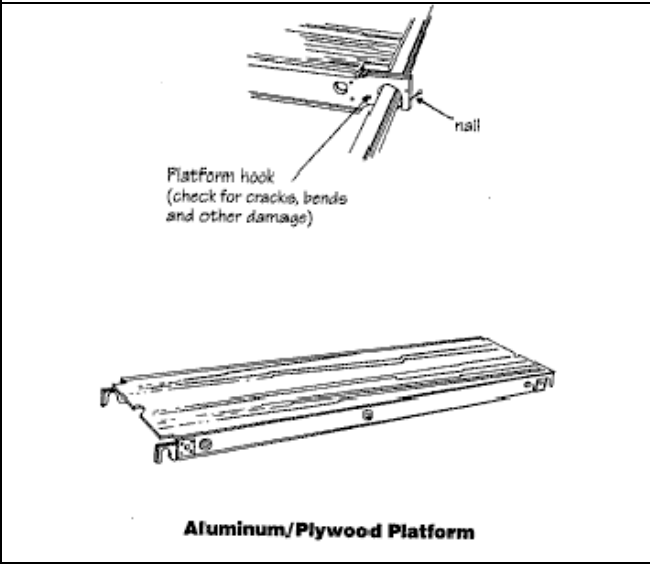
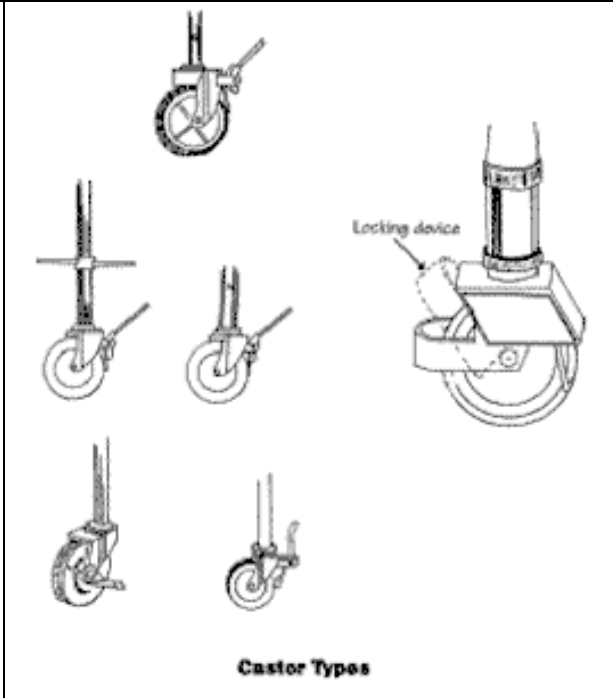
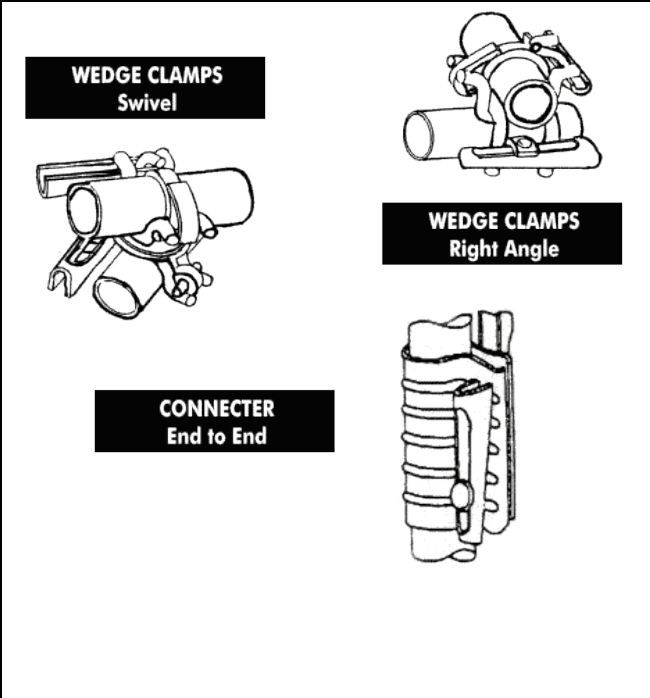
Plank Inspection Criteria



CROSS BRACES







SECTION 5.33 Welding, Cutting and Brazing

The Commission has implemented this Directive for welding, cutting and brazing operations. The Directive complies with Title 29 Code of Federal Regulations (CFR) §1910 Subpart Q, Welding, Cutting and Brazing and §1926 Subpart J, Welding and Cutting.

PURPOSE

The purpose of this Directive is to define the safety requirements for welding, cutting, brazing, metals grinding and other hot work.

APPLICABILITY

This Directive applies to all Commission employees who perform welding, cutting, brazing, grinding and other hot work activities on any Commission property.

DEFINITIONS

Combustible means any material that has the possibility of catching fire or supporting fire.

Hot Work refers to operations including welding, cutting, brazing, use of open torch or similar operations.

Hot Work Area is the area that is exposed to sparks, hot slag, or radiant or convective heat as a result of the hot work.

Hot Work Equipment is electric or gas welding or cutting equipment used for hot work exposures.

Personal Protective Equipment means devices worn by employees to protect them against hazards in the environment. Examples include safety glasses, face shields, respirators, gloves, welding (apron, sleeves, chaps) hard hats, work boots and hearing protection.

RESPONSIBILITIES

Risk Management and Safety Office:

Have the overall responsibility for developing, implementing and monitoring this directive.

Provide general training on Hot Work procedures.

Provide a periodic audit of Hot Work procedures.

Shall provide employee training or arrange employee training.

Keep copies of employee training records.

Conduct a review of the program and make any revisions as necessary.

Supervisors

Ensure policies and procedures are followed.

Issue hot work permits.

Ensure the personnel assigned to perform “Hot Work” and “Fire Watch” duties have received adequate instruction and training.

Employee

Attend training sessions provided by their supervisor and/or the Risk Management and Safety Office.

Carry out all required procedures as outlined in this Directive and the training sessions.

Report any unsafe or unhealthy work conditions and job-related injuries or illnesses to their supervisor immediately.

Fire Watch personnel

The primary responsibility of a “Fire Watch” is to monitor for potential fire hazards and the presence of fire during operations such as welding and cutting.

- Continuously monitor the area surrounding the immediate workspace for conditions that could result in a fire or explosion
- Immediately stop all “Hot Work” in the event of a fire, emergency or other unplanned event affecting the safety of employees
- Know the permit requirements relative to fire protection and ensure they are being followed while hot work is being performed
- Extinguish fire when they occur if possible. When a fire occurs, all work shall be discontinued, and the supervisor or designated contact must be notified immediately
- When a fire or fire potential is not controllable, follow applicable emergency procedures
- Remain at the assigned location at all times, except when evacuating
- Perform no other work that will interfere with fire watch duties
- Remain at the work site for at least thirty (30) minutes after welding, torch cutting, and other such hot work operations have ceased to ensure smoldering or other potential fire conditions do not exist
- Upon completion of work and it is determined smoldering fires are not present, the “Fire Watch” is responsible for returning and/or storing fire fighting equipment to it’s original location as directed by the supervisor or other responsible person

REQUIREMENTS

General

Authorized hot work areas for welding and cutting shall be free of flammable and combustible materials, provided with adequate fire extinguishing equipment, and properly screened off to prevent access to unauthorized personnel and exposure to hazards.

Hot Work Permits

Permits for Hot Work are required for all welding; cutting and brazing operations exclusive of those areas designated as authorized free-burn areas.

The Commission Hot Work Permit form shall be the permit system.

Hot Work permits shall be obtained from department supervisors.

Permit issuers shall retain copies of all Hot Work permits issued for a period of 1 year.

A new permit shall be completed where there is an interruption in the work process, shift changes, work condition changes or generally left unmonitored for significant periods of time.

Before beginning hot work activities, the affected area(s) shall be inspected and results documented on the Hot Work Permit form.

Air monitoring shall be conducted in accordance with the established procedures and regulations.

Hot Work Permits shall be posted at the location in a highly visible area.

FIRE PREVENTION and PROTECTION

If the object to be welded or cut cannot be readily moved to an area designated for the hot work, all movable fire hazards in the vicinity shall be moved at least thirty-five (35') feet from the work site.

Combustibles and flammables that cannot be relocated shall be isolated from ignition sources by flameproof covers or otherwise shielded with metal or fire-resistant guards or curtains.

Appropriate fire extinguishing equipment shall be readily available for use whenever hot work is performed.

- A fire extinguisher rated at not less than 2-A: 20-B: C shall be available in shop areas where hot work is performed
- A fire extinguisher rated at not less than 2-A: 10-B: C shall be available in areas where hot work is performed
- A fire extinguisher rated at not less than 2-A:10-B: C shall be attached to all portable cutting and welding carts

A Fire Watch standby shall be provided when welding or cutting is performed where there is a potential for a fire for a minimum of thirty (30) minutes after the completion of hot work operations.

APPROVED OPEN BURN AREAS

Welding shops can qualify as an open burn area and need not post "Hot Work" permits as long as they are kept well maintained in a sanitary and uncluttered manner, without the build-up of combustibles. If housekeeping conditions warrant it, they will be required to post "Hot Work" permits.

HOT WORK OPERATIONS

Prior to Hot Work:

- Cutting and welding operations shall be restricted to authorized, properly trained individuals
- Inspect the hot work area to identify any fire hazards. Look for flammable and combustible materials
- If possible, hot work should be performed in a properly designated shop area equipped with all the necessary controls and adequate ventilation
- Move combustible and flammable materials at least thirty-five (35) feet from the work site. If this is not possible, protect the materials with metal guards or by flameproof curtains or covers (other than ordinary tarpaulins)
- Seal cracks and openings through which hot sparks or slag may enter. As an alternate means, a fire-resistant shield or blanket may be used to block the openings
- Sweep the floor and remove all loose combustible debris
- Prior to starting hot work make sure that the appropriate authorities (Park Police) have been notified if the hot work is to take place in an area that is equipped with fire suppression equipment or smoke detection equipment. Make it known whether the equipment will be covered or if it needs to be bypassed
- Cover sprinkler heads directly above the hot work area with wet rags or other non-combustible materials so they will not be triggered during the work. Remember to remove the items from the sprinkler head when the work is completed
- Cover smoke detectors located in close proximity of the work area. Remember to remove the covers when work is completed
- At the end of each work shift/day, and/after completing hot work, make sure that the fire suppression and detection equipment is uncovered and/or back on line. Notify the appropriate authorities (Park Police) that the hot work is completed, and the equipment has been uncovered or can be put back on-line

During Hot Work:

There are other precautions that must be taken during hot work:

- The appropriate fire extinguishing equipment shall be maintained in close proximity to the hot work for its entire duration, plus thirty (30) minutes after

completion of work. A fire extinguisher rated at not less than 2-A: 10-B: C (known as 10 lb. ABC dry chemical) shall be available during the hot work operations

- Combustible floors shall be kept wet during the hot work
- Store acetylene and other fuel cylinders in a secure and upright position
- Place hoses so that they will not be crushed or damaged

After Hot Work

There are some responsibilities that shall be undertaken after hot work is completed

- The fire watch shall remain at the site for at least thirty (30) minutes following the completion of the hot work
- Fire extinguishing equipment shall remain accessible in the area until the fire watch is secured
- Remove any covers from sprinkler heads immediately upon completion of the hot work
- Remove covers from any smoke detectors immediately upon completion of the hot work

CUTTING and WELDING in CONFINED SPACES

Hot work performed in confined spaces shall conform to OSHA's Confined Space requirements, as well as the Confined Space policy of this manual. (See the Commission's Confined Space Entry Program).

GENERAL CUTTING and WELDING CONTROLS

Areas where hot work is done should be properly designated and prepared. Combustible and flammable materials within the work area should be protected against fire hazards and the operation should not pose a hazard to others in nearby areas.

VENTILATION and ATMOSPHERIC TESTING

Hot work **shall not** be conducted in the presence of explosive mixtures of flammable gases, vapors, liquids, or dusts or where explosive mixtures could develop inside improperly prepared tanks or equipment. Atmospheric testing and monitoring for combustible gases and vapors should be done before work begins and at regular predetermined intervals thereafter. Ventilation of the work site, either through local or general exhaust ventilation, should be adequate for the work performed.

COMPRESSED GAS CYLINDERS

Storage and handling of compressed gas cylinders are important parts of many cutting and welding operations. The following safe work practices shall be observed:

Empty cylinders shall be labeled as such and kept separate from full cylinders.

Use cylinders in an upright position, particularly those containing liquefied gas or acetylene.

When transporting cylinders, they shall be secured and kept in an upright position, with the gauges removed and the valve cap on.

Oxygen and fuel gas cylinders shall be stored separately with the protective valve caps in place. Oxygen cylinders in storage shall be separated from fuel gas cylinders or combustible materials (especially oil or grease), a minimum distance of twenty (20) feet or by a non-combustible barrier at least 5 feet high having a fire resistance rating of one half hour.

Cylinders shall be secured against being knocked over with a non-combustible restraint such as a strap or chain.

Cylinder carts equipped with a cylinder restraint, such as a chain or strap, shall be used for transporting compressed gas cylinders.

Cylinders shall be secured from tipping by keeping them in an upright position.

The metal cylinder cap shall be in place to protect the valve when the cylinder is not connected for use. Special safety caps allowing the regulators and hoses to stay in place shall be used where welding and cutting outfits are used on a daily basis.

Gauges shall be turned off and hoses shall be "bled" when not in use.

All fuel-gas welding, burning and cutting equipment shall be equipped with a check valve, preferably located at the torch-end of the system.

Make sure the threads on a regulator or union corresponds to those on the cylinder valve outlet. DO NOT force connections that do not fit.

Open cylinder valves slowly. A cylinder not provided with a hand wheel valve shall be opened with a spindle key or special wrench or other tool provided or approved by the gas supplier or manufacturer. **The key should be attached to the cylinder for quick access in case of emergency.**

DO NOT use a cylinder of compressed gas without a pressure-reducing regulator attached to the cylinder valve, unless the attachment is to a manifold that contains its own regulator.

Before making a connection to a cylinder valve outlet, "crack" the valve briefly to clear the opening of particles of dust or dirt. Always point the valve and opening away from the body and not toward anyone else. NEVER crack a fuel gas cylinder near other welding work, sparks, open flames or other sources of ignition.

Use regulators and pressure gauges only with the gas for which they were designed and intended. DO NOT attempt to repair or alter cylinders, valves or attachments. The protective glass face of gauges shall be kept intact or replaced prior to use of the equipment.

WELDING or CUTTING of CONTAINERS and PIPING

No Hot Work shall be performed on used drums, barrels, tanks, or other containers until it can be determined that no flammable materials or other materials are present which, when subjected to heat, may produce flammable or toxic vapors. Containers shall be adequately vented to the atmosphere to prevent explosion. When containers do contain flammable or toxic materials, the following precautions shall be taken:

- Piping to the containers shall be disconnected or blanked off
- The container shall be cleaned of the flammable or toxic materials; and/or
- The container shall be purged with an inert gas
- After purging is complete, the atmosphere in the container shall be sampled to ensure it is safe for hot work

If the above precautions cannot be accomplished, the container shall be filled with water before the hot work is performed.

N.B. Please ensure that the container does not contain any water reactive material/residue and/or any other toxic substance prior to filling with water.

FIRE WATCH

Training

Personnel assigned to perform “Fire Watch” duties shall be trained prior to assignment to perform such duties. Training shall include:

- Use of fire fighting equipment such as extinguishers and water hoses
- Emergency notification procedures
- Properties of fire
- Duties of a “Fire Watch”
- Potential hazards
- Use of emergency equipment

TRAINING

Individuals Performing Hot Work and Firewatchers

All Commission employees performing hot work or acting, as the firewatcher shall be trained to conduct hot work activities. The training shall contain the following:

- Proper equipment operation
- Handling and storage of welding materials
- Compressed gas safety
- Chemical hazards
- Written procedures, including completion the hot work permit
- Communication with employees in the monitoring area

RECORDKEEPING

All hot work permits shall be kept on file with the individual departments. Records of hot work permits shall be maintained for one calendar year. Hot work permits on file shall be reviewed for improvement or modification purposes prior to disposal.

PROTECTION of EMPLOYEES

All outer clothing shall be free from oil or grease.

Synthetic or plastic clothing shall not be worn by persons performing welding activities.

Employees in the monitoring area shall be provided with communication equipment.

Welding helmets and face shields shall be used to protect the face, forehead, neck and ears from direct radiant energy from the arc and from weld spatter.

Sleeves and collars shall be kept buttoned. Pants shall overlap shoe tops to prevent spatter from getting into the shoes.

If respiratory protection is required, respirators shall be used in accordance with the Commission's Respiratory Protection Directive.

Fire resistant screens or curtains shall be used around the welding area to protect passers-by from flying sparks and exposure to arc flash.

When welding or cutting with covered electrodes using alternating current (AC) single-phase transformer-rectifier arc welding machines and under electrically hazardous conditions, the welding operator shall use dry gloves and clothing, non-conductive footwear, and avoid accidental contact with live electrical parts.

Filter Lens Shades shall be selected in accordance with the chart published by OSHA. (See attachment A).

Typical types of PPE:

- Welding helmets shall be worn during all arc welding and arc cutting operations.
- Welding screens shall be used when other employees and/or the general public are exposed by the flash of arc welding and cutting operations.
- Helpers or firewatchers shall be equipped with the proper eye protection.
- Goggles or other suitable eye protection shall be used during all gas welding or gas cutting operations.
- Gloves, aprons and other protective gear shall be worn to protect against recognized hazards.

Appendices:

Appendix A – Filter Lens Shade Specifications

Appendix A – Filter Lens Shade Specifications

Filter Lens Shade Specifications

Welding Operation	Suggested Shade Number
Shielded metal-arc welding, up to 5/32 in. (4 mm) electrodes	10
Shielded metal arc welding, 3/16 to 1/4 in. (4.8 to 6.4 mm) electrodes	12
Shielded metal-arc welding, over 1/4 in. (6.4 mm) electrodes	14
Gas metal-arc welding (nonferrous)	11
Gas metal-arc welding (ferrous)	12
Gas tungsten-arc welding	12
Atomic hydrogen welding	12
Carbon arc welding	14
Torch soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 in. (25 mm)	3 or 4
Medium cutting, 1 to 6 in. (25 to 150 mm)	4 or 5
Heavy cutting, over 6 in. (150 mm)	5 or 6
Gas welding (tight) up to 1/8 in. (3.2 mm)	4 or 5
Gas welding (medium) 1/8 to 1/2 in. (3.2 to 12.7 mm)	5 or 6
Gas welding (heavy) over 1/2 in. (12.7 mm)	6 or 8

The choice of a filter shade may be based on visual acuity and may therefore vary widely from one individual to another, particularly under different current densities, materials, and welding processes. However, the degree of protection from radiant energy afforded by the filter plate or lens chosen to allow visual acuity shall still remain in excess of the needs of eye filter protection. Filter plate shades as low as shade 8 have proven suitably radiation-absorbent for protection from the arc welding processes.

NOTE: In gas welding where the torch produces a high yellow light, it is desirable to raise to a filter lens that absorbs the yellow or sodium line in the visible light of the operation (spectrum).

PREVENTING VIOLENCE IN THE WORKPLACE

AUTHORITY	Merit System Rules and Regulations, Discipline Chapter
REFERENCES	Merit System Rules and Regulations, Discipline Chapter; Employee Assistance Program; and, Occupational Safety and Health Administration (OSHA) General Duty Clause, 29CFR, Section 1903.1.
BACKGROUND	<p>Violence, in one form or another (including homicides), is occurring with increasing frequency in America. Recent studies have shown that as many as two million incidents of workplace violence occur each year, with workplace homicides being the second leading cause of occupational fatalities in the United States.</p> <p>Violence at work is a threat to employees’ safety and can impair their ability to perform their duties. In response to the nationwide rise in violence in the workplace, the Maryland-National Capital Park and Planning Commission is taking a proactive approach to minimize workplace violence.</p>
APPLICATION	This policy applies to all Commission employees, including appointed officers, non-career employees, and volunteers.
PURPOSE	The Commission is committed to providing a violence-free work environment for employees, patrons, volunteers, and visitors. This policy emphasizes the Commission’s declaration of zero-tolerance of violence in all Commission facilities.
POLICY	Violence, including but not limited to, violent outbursts, intimidation, verbal or nonverbal threats, harassment, bullying, or other forms of threatening behavior by or against any Commission employee, citizen or patron will not be tolerated or excused. Commission employees are required to report all incidents covered by the terms of

this policy, whether the offender is an employee or non-employee. Employees may not excuse or cover for a co-worker, a citizen, or patron who threatens or commits a violent act against a Commission employee, a non-employee, or property.

An employee may be disciplined for on-the-job action(s) when the Commission's policies, or federal/state/local laws regarding violence are violated. The Commission reserves the right to take any necessary disciplinary action up to, and including dismissal for any serious breach of Commission policy or work rules (Merit System Rules and Regulations, Discipline Chapter).

The following are examples of employee actions that may result in a disciplinary action being taken:

- behavior which is detrimental or disruptive to accomplishing the Commission's work program that may include, but is not limited to, physical fighting, verbal abuse, harassment;
- abuse or destruction of Commission property or another employee's property on site;
- unauthorized use or possession of dangerous weapons on Commission property;
- threatening to do any of the above.

The Commission will, to the extent practicable, investigate any incident involving an employee or non-employee and will take any action necessary to remove threats posed by an employee or a non-employee. The Commission may also prosecute offenders of its violence in the workplace policy.

PROCEDURES

The Executive Director shall provide for the implementation of this policy through the issuance of Administrative Procedures. These procedures shall outline the responsibilities of the departments, supervisors, and employees in preventing, reporting, and investigating incidences of violence in the workplace.

SECTION 5.35 First Aid Kits

The M-NCPPC has implemented this Directive to ensure employees will be provided with adequate first aid supplies in the event of an injury. This program complies with Title 29 Code of Federal Regulations (CFR) §1910.151, Medical and First Aid.

PURPOSE

The purpose of this Directive is to ensure that every agency employee potentially experiencing a workplace injury has access to adequate first aid supplies as needed.

APPLICABILITY

The Directive applies to all M-NCPPC employees and work sites where there may be a potential for a workplace injury during normal working conditions, non-routine tasks, or during an emergency situation.

DEFINITIONS

First Aid means the emergency care provided for injury or sudden illness before emergency medical treatment is available.

First Aid Provider is someone who is trained in the delivery of initial medical services using a limited amount of equipment to perform a primary assessment and intervention while awaiting arrival of emergency medical services personnel.

REQUIREMENTS

According to the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.151, when a facility is not in near proximity to a medical center, first aid supplies shall be readily available. First aid kits should be stocked according to the OSHA guidance on the contents of first aid kits, as referenced in Attachment A of this Directive.

Over-the-Counter (OTC) medications such as oral pain relievers, antihistamines, cough and cold medicines, etc., **shall not be included in first aid kits**, as they may result in unintended consequences from ingestion.

Managers should ensure first aid kits are located in a visible location which is accessible to employees within the facility. The Supervisor shall ensure kits meet the recommendations for the hazards associated with the workplace. Kits shall, at a minimum, comply with the American National Standards Institute's (ANSI) Standard ANSI/SEA Z308.1, Minimum Requirements for Workplace First Aid Kits and Supplies. These are identified in Attachment A.

RESPONSIBILITIES

Risk Management and Safety Office

Conduct periodic inspections of first aid kits located at M-NCPPC facilities for compliance with this Directive.

Department Management

- Ensure compliance with this First Aid Kits Directive.
- Ensure the first aid kits are placed in visible locations in facilities, and that the contents follow the Requirements Section of this Directive.

Employees

- Comply with this First Aid Kits Directive.

Attachment A: Minimum Requirements for Workplace First Aid Kits and Supplies

Minimum Requirements for Workplace First Aid Kits and Supplies
(based on OSHA Reference to the American National Standards Institute's [ANSI] Standard ANSI/ISEA Z308.1-2015, Workplace First Aid Kits and Supplies)

Classes of First Aid Kits and Required Supplies				
First Aid Supply	Minimum Quantity		Minimum Size or Volume	
	Class A Kits	Class B Kits	(US)	(metric)
Adhesive Bandage	16	50	1 x 3 in.	2.5 x 7.5 cm
Adhesive Tape	1	2	2.5 yd (total)	2.3 m
Antibiotic Application	10	25	1/57 oz	0.5 g
Antiseptic	10	50	1/57 oz	0.5 g
Breathing Barrier	1	1		
Burn Dressing (gel soaked)	1	2	4 x 4 in.	10 x 10 cm
Burn Treatment	10	25	1/32 oz	0.9 g
Cold Pack	1	2	4 x 5 in.	10 x 12.5 cm
Eye Covering w/attachment	2	2	2.9 sq. in.	19 sq. cm
Eye/Skin Wash	1 fl oz total			29.6 ml
		4 fl. oz total		118.3 ml
First Aid Guide	1	1	N/A	N/A
Hand Sanitizer	6	10	1/32 oz	0.9 g
Medical Exam Gloves	2 pair	4 pair	N/A	N/A
Roller Bandage 2 inch	1	2	2 in. x 4 yd	5 cm x 3.66 m
Roller Bandage 4 inch	0	1	4 in. x 4 yd	10 cm x 3.66 m
Scissors	1	1	N/A	N/A
Splint	0	1	4.0 x 24 in.	10.2 x 61 cm
Sterile pad	2	4	3 x 3 in.	7.5 x 7.5 cm
Tourniquet	0	1	1 in. (width)	2.5 cm (width)
Trauma pad	2	4	5 x 9 in.	12.7 x 22.9 cm
Triangular Bandage	1	2	40 x 40 x 56 in.	101x 101 x 142 cm

Class A Kits (for Office Environments)

Class A first aid kits are intended to provide a basic range of products to deal with most common types of injuries such as: major wounds, minor wounds (cuts and abrasions), minor burns, and eye injuries.

Class B Kits (for Maintenance Yards and Community)

Class B kits are intended to provide a broader range and quantity of supplies to deal with injuries encountered in more populated, complex, and/or high risk workplace environments such as maintenance yards and community centers.

The above lists are basic requirements for workplaces. Management should evaluate their workplaces to determine specific contents that need to be kept on hand. Over-the-Counter medications are not to be maintained in first aid kits.

SECTION 5.36

Volunteers: General Guidelines for Using Power Tools

The mission of The Maryland-National Capital Park and Planning Commission (“Commission”) is to manage physical growth and plan communities, to protect and steward natural, cultural and historic resources; and to provide leisure activities and recreational experiences. The achievement of this mission is best served by the active encouragement and participation of citizens. To this end, the Commission encourages and values the involvement of volunteers at all levels commensurate with their skills and interests, and within all appropriate programs and activities within the Commission.

PURPOSE

The purpose of this Administrative Procedure is to provide specific information and to establish uniform guidelines to be used in all volunteer programs and activities that utilize power tools in the maintenance and possible construction of park projects on public parkland.

APPLICABILITY

These Administrative Procedures apply to all volunteers in all programs and projects undertaken on behalf of the Commission.

POLICY

Recognizing that the community’s involvement in the park system makes the system better and enhances the parks in many ways, it is the policy of the Commission to utilize volunteers when:

- There are projects that can be done by volunteers and there are volunteers who want to do the projects; and
- The projects further the mission of the Commission.

It is also the policy of the Commission that all volunteer activities are approved by the Commission and are conducted in a safe and healthful manner.

GENERAL GUIDELINES

The following guidelines shall apply to all volunteers participating in activities and programs in which power tools will be utilized during the course of a Commission assignment or project:

Project:

- All work conducted by volunteers must be in accordance with the Commission’s mission, values, and approved work programs. Any individual volunteer or volunteer group may be denied authorization to perform work on park property or may have authorization revoked at the discretion of the Commission.
- Commission departments, individual volunteers, or the community can propose projects.
- The parcel of land or project being assigned for volunteer activities must be identified and approved by the Department Head or their designee.

Memorandum of Understanding/Simple Agreements:

- A Memorandum of Understanding (“MOU”) shall be used to guide the partnership between the Commission and organized groups dedicated to advancing the Commission’s interest. The departmental Volunteer Services Office (“VSO”) is responsible for coordinating the MOU with the respective Department Head and the Commission’s Legal and Risk Management Offices. A certificate of insurance may be required for certain construction projects.
- Simple Agreements may be used for Ad hoc groups or individual volunteers. The project manager is responsible for coordinating with the Departmental VSO. A certificate of insurance may not be required when using such agreements.

Registration:

- Volunteers shall be registered through the departmental VSO and complete appropriate documentation as required by the respective VSO.
- Depending on the project or activity, volunteers may be required to sign a waiver of liability. A determination will be made by the VSO in collaboration with the Legal Department and the Risk Management and Safety Office.

Equipment/Tools:

- Volunteers may use power tools necessary for the completion of projects when evidence is provided to support relevant training and/or certification has been successfully obtained for use of such equipment. Certification can be sought and acquired through recognized certification programs, apprenticeship programs, colleges, universities, trade schools and businesses. For smaller electric power equipment, users must demonstrate to designated personnel that they are competent users.
- The Commission may assist in supporting the work of the volunteers by providing tools, supplies, equipment and supervision.

Training/Education:

- Prior on-the-job experience can be used to demonstrate that a volunteer is competent to use a specific power tool(s). Volunteers will be required to document and provide evidence of any certification to the VSO.
- Any necessary orientation sessions will be coordinated by the department’s VSO and may include safety related topics based on projects assigned.

Supervision:

- Supervision of volunteers will be determined on a project-by-project and case-by-case basis by the Department Head or designee (i.e, Volunteer Coordinator).
- In unsupervised activities, volunteers will be responsible for assessing and determining potential hazards for each site prior to engaging in any activity with power tools. Identified hazards shall be reported to the VSO. The VSO shall consult with the Risk Management and Safety Office.

Safety of Volunteers:

- A determination of specific safety standards must be made prior to approval of the project. This determination must be made by the VSO in collaboration with the Risk Management and Safety Office.
- Volunteers must report any accidents and/or incidents that occur in the course of an assignment to the Commission’s VSO.
- Volunteers are encouraged to report all vandalism to the Commission’s VSO.
- Volunteers must obtain and wear the proper personal protective equipment, including, but not limited to the following:
 - Head protection
 - Eye protection

- Face protection
- Leg protection
- Foot protection
- Hand protection
- Hearing protection

Youth Participation:

- Minors (volunteers under the age of 18) shall not be permitted to use power tools unless involved in a vocational trade (which requires training and supervision) and there is a MOU with the Commission through the Department Head or designee. However, some smaller electrical devices (such as a hand held power drill) could be permitted for minors between the ages of 16-18 under the discretion of the Department Head or their designee. Such decisions should be made in consultation with the Risk Management and Safety Office.

Specific Volunteer Categories

In addition to the above general guidelines, the following shall apply to specific volunteer categories:

Individual Volunteers:

- The Department Head or their designee will approve or disapprove the project, tools, and supervisory arrangements for the individual volunteer.
- Use of allowable power tools (and other) equipment will be listed in the Volunteer Job Description for the position filled by the individual volunteer. The departmental VSO shall be responsible for providing a job description to the volunteer.
- If a volunteer becomes a member of an existing park crew, the volunteer will be subject to oversight and supervision by the crew leader.

Ad Hoc Organized Volunteer Groups (Organized by the community or Commission):

Examples of ad hoc groups include, but are not limited to: civic groups, families, and Scouting Organizations who conduct environmental projects (cleanup), beautification programs etc.

- The Department Head or designee will approve or disapprove the project, tools, and supervisory arrangements for groups organized on an ad hoc basis to complete a project in the park system.
- The leader of the volunteer group or Commission staff may be assigned to supervise the work project.
- The volunteer group may become a member of an existing park crew and be subject to oversight and supervision by the crew leader.
- A MOU or a simple agreement may be used to guide Ad Hoc volunteer activities (see section on MOUs/simple agreements).
- The MOU or simple agreement shall reflect the purposes and rules regarding volunteer activities.

Organized Recreational and Environmental Volunteer Groups:

Organizations dedicated to advancing the Commission’s interest may be permitted to complete maintenance and construction projects within the park system. In addition to the general conditions listed above, the following guidelines shall apply:

- The Commission will enter into a partnership with organizations who can further the improvement of the park system through the VSO.
- The partnership will be guided by an MOU (see section on MOUs) outlining the partnership relationship. In the event the volunteer organization is completing a construction project on behalf of the Commission, the group will provide a certificate of insurance naming the Commission as an additional insured as required by the Commission’s Risk Management and Safety Office.
- All plans, drawings and specifications for work by volunteers and volunteer organizations, must receive prior approval by the Commission’s VSO. Special attention must be given to ensure adjacent or nearby properties and citizens are not in harms way.
- A certified instructor in power tools may be used by the volunteer group to train individual volunteers on the safe operation of power tools.

- The volunteer group must ensure that power tools are in proper working condition and meet all necessary safety requirements of the manufacturer.

SECTION 6.01

Risk Management Plan

The Maryland-National Capital Park and Planning Commission is committed to making decisions that will prevent and minimize the adverse effects of accidental losses. The purpose of the Risk Management Plan is to provide information and guidance on operational techniques and services for risk management programs and activities designed to preserve and protect employees, patrons, and physical assets of the Commission.

The components of the Risk Management Plan include the following: Insurance; Contracts; Purchasing; Risk Analysis and Controls; Safety Program and Responsibilities; Inspections, Audits and Reviews; Safety Compliance and Training Programs; Incentive Award Programs; Accident Reporting.

The Risk Management Plan complements the strategic Plan and shall be reviewed annually and updated to reflect new information, operational techniques, and services. The following Plan details the application of various risk management and safety programs, policies, and procedures aimed at reducing exposure to potential risks.

APPLICABILITY

The Risk Management Plan shall apply to all employees including Merit System and contract employees, volunteers, and appointed individuals. If any portion of this Plan conflicts with a Collective Bargaining Agreement, the Agreement shall prevail for members of the respective collective bargaining unit.

OPERATIONAL PLAN

Insurance

The Commission is one of several local agencies that participate in the Montgomery County Self-Insurance Fund (MCSIF). The Commission is unique in the Fund as it only purchases some excess coverage and claims handling services. There is no risk sharing among agencies as all the other members do. The Commission enjoys more favorable insurance rates through its participation in the Fund. The Commission is self-insured through the MCSIF for several insurance programs, including the following:

- Comprehensive General Liability
- Automobile Liability and Comprehensive Damage
- Workers' Compensation
- Real and Personal Property Damage (up to \$250,000 or \$500,00 for designated flood zones)
- Boiler and Machinery

We continue to buy commercial insurance for the following risks:

- Bonds on Public Officials, Employees, Depositors
- College Park Airport Liability
- College Park Airport Museum
- Flood protection
- Cyber exposures
- Inland Marine Floater Policy

Contracts

When making contracts and various kinds of written agreements, it is proper for the parties to assume their proper share of whatever liabilities may arise from the agreement. It is generally in the Commission's best interest to transfer as much responsibility as possible to the other party. Use Commission practice 4-14 as your guide to processing contracts and other written agreements. Contact the Risk Management Office whenever you have a question about insurance or liability clauses in contracts. Please review insurance checklist (Appendix A) for additional requirements.

Types of contracts and agreements now in use are as follows:

- Concessionaire Agreement
- Consultant Agreement
- Instructor's Agreement
- Theatre Performance Agreement Scenic Easement Agreement
- Right-of-Way Agreement
- Construction Contract Land Purchase Contract
- Architectural Design Contract
- Grant Contracts
- Residential Lease Agreements Farm Lease Agreements
- Lessor's Lease Agreements

Recommended Clauses for Contracts/Agreements:

1. *"Hold Harmless Clause"* is a legal statement by the other party to our contract, that we will not be held liable for their negligent acts. All contracts or agreements should include this clause. The wording of the clause may vary because of the type of contract, agreement or lease.
2. *Comprehensive Auto and General Liability Clause:* In addition to the "Hold Harmless Clause," it is important that the other party to the contract, who has assumed liability, be funded with insurance so he/she can pay the damages for which he/she becomes liable.
3. *Workers' Compensation Clause:* The Workers' Compensation Act was passed by the State of Maryland to provide compensation for loss of earnings resulting from accidental injuries sustained during employment. If the other party to a contract does not have workers' compensation insurance, the Commission may be liable for payment to the contractor and his/her employees. Therefore, it is important that all parties of a contract include a clause for workers' compensation.
4. *Certificate of Insurance:* A certificate of insurance is a document signed by the legal representative of the insurer that verifies the insurance requirements of vendors, contractors and suppliers of services. The certificate should accompany any contract or agreement when processed for review and execution. All parties to a contract or agreement with the Commission must submit a certificate of insurance.

Purchasing

There are two items of Risk Management importance in Commission Practice 4-10 on Purchasing. One has to do with purchasing materials and supplies, and the other concerns contracts.

First, ensure that vendors provide supplies, materials, and equipment that follow appropriate state and federal health and safety regulations, including those of the Maryland Occupational

Safety and Health Act (MOSHA) and the Consumer Product Safety Commission. Vendors of chemicals including solvents, weed killers, paints, and art supplies shall ensure that containers are properly labeled. A Material Safety Data Sheet (MSDS) must also be provided on each chemical product.

Second, construction contracts shall require that the contractor comply with all provisions of MOSHA standards of construction (29 CFR 1926).

Risk Analysis and Control

The Commission identifies potential loss exposures through an aggressive loss control and safety program. The Risk Management and Safety Office conducts facility and equipment inspections to identify potential liability exposures and safety hazards. The Commission also uses external experts in risk management to conduct risk assessments of programs and activities. Once exposures are identified, the Commission employs risk control and risk financing techniques to prevent and minimize or fund losses that inevitably occur. Programs, policies and procedures have been developed to minimize the frequency and severity of these losses.

Revisions to risk procedures are considered annually as part of the budget and risk management review process. The Commission also conducts weekly reviews of employee and third-party claims, including actual and projected costs, types of injuries, cause of injury or incident, location, claimant, and demographics (gender and age). Information is separated into the following categories: (1) general liability (third party claims, automobile, and property); and (2) workers' compensation.

The Commission conducts annual risk management program analysis of both claims history and projected trends. This report is provided to management and safety committees to promote a greater understanding of agency-wide trends.

Safety Program Responsibilities

Commission *supervisory personnel* are directly responsible for the safety and health of employees within their work units, including the safe operation of machinery and equipment. In addition, the supervisor must inform new employees of the safety hazards of their job duties and the proper safety procedures to be followed. M-NCPPC employees share the responsibility for accident prevention and should be aware of safe methods, procedures, and regulations related to their jobs.

Responsibilities:

1. The *Executive Director* is the overall supervisor of the Risk Management Program and provides technical support to field operations through the DHRM's Risk Management Office.
2. The *Secretary-Treasurer* is responsible for financial management and reporting on the Commission's Risk Management Fund, (Fund 63), and on the Montgomery County Self-Insurance Fund's management of Commission reserves. He/she also represents M-NCPPC on the Interagency Insurance Panel, along with the Risk Manager, and recommends commercial insurance coverage to the Commission.
3. *Department Heads* share the greatest responsibility for controlling losses, but they also have resources available to help them. It should be assumed that all management and supervisory personnel share in these responsibilities:
 - Make risk assessments and recommendations for programs and facilities, using the Safety Committees and the Risk Management and Safety Office;
 - Ensure safe work and patron environments through the maintenance program;
 - Require the use of safe procedures and personal protective equipment by employees, volunteers, and patrons;

- Develop and use designs and specifications which follow accepted safety standards;
 - Require inspections of areas, activities and facilities for which they are responsible; this includes providing time for MOSH inspectors to carry out our agreement with the State;
 - Provide prompt investigation, review and remedial action for all losses reported and;
 - Provide for safety training for M-NCPPC employees, with special emphasis on new employees, drivers, persons in high-risk activities, and for direct patron services.
 - Immediately report all injuries and unsafe conditions to supervisory personnel for corrective action.
 - Wear or use proper protective clothing and equipment required for job duties.
 - Operate only authorized equipment and machinery.
 - Inspect all tools and equipment for safety defects before use.
 - Keep work areas clean and orderly.
 - Observe the safety regulations of the M-NCPPC and the State of Maryland.
4. *Safety Committees* are appointed by the Director of Parks in Montgomery County and by the Director of Parks and Recreation in Prince George's County. Each Committee has a planning Department representative in addition to persons from each Park and Recreation Division. Generally, both Committees will:
- Review accidents and injury data, inspections and related activities, and help promote and implement safety awareness and compliance training programs.
 - Advise Department Heads and the Risk Manager on ways for improving the M- NCPPC loss control effort.
 - Assist in safety awareness campaigns (such as Lime, Zika, Ebola and other special awareness campaigns as necessary).
 - Department heads may assign additional responsibilities. How these responsibilities are carried out each year will depend on the budget and the time available to carry out collateral duties.

The Office of Risk Management and Safety will host a quarterly Executive Safety Committee (ESC) and include the Chairperson from both Counties. The ESC will provide training and guidance; as well as set agendas for Departmental Safety Committees.

5. *Risk Management and Safety Staff* is the principal source for technical information and support services on occupational safety and health, workers' compensation benefits, and other forms of insurance. The duties of the Risk Manager and his/her staff are as follows:
- Manage the commercial insurance program, in cooperation with the Secretary-Treasurer.
 - Plan and coordinate the safety program for the Commission; this includes training in loss control, first aid/CPR, OSHA compliance programs, driver improvement programs, inspections and accident investigations (with the Park as deemed appropriate).
 - Assist in the development and review of plans and specifications for M-NCPPC facilities and equipment to ensure optimum safe standards.
 - Provide technical assistance to department heads, safety committees, and all employees.
 - Recover damages from persons who injure Commission employees and damage Commission property (in cooperation with the General Counsel).

- Keep all interested persons informed on the progress and needs of the Risk Management program.
- Maintain the Safety and Risk Management manual.
- Review Commission contracts to ensure that vendors and contractors have adequate coverage, indemnity clauses and certificates of insurance to protect the interest of the Commission.

6. *Employees are responsible for following these general safety guidelines:*

- Immediately report all injuries and unsafe conditions to supervisory personnel for corrective action.
- Wear or use proper protective clothing and equipment required for job duties.
- Operate only authorized equipment and machinery.
- Inspect all tools and equipment for safety defects before use.
- Keep work areas clean and orderly.
- Observe the safety regulations of the M-NCPPC and the State of Maryland.

Inspections, Audits and Reviews

Safety Audits and Inspections are conducted periodically to help ensure compliance with Commission safety standards as well as other local, state, and federal regulations. The Risk Management and Safety Office conducts safety and loss control audits. Results of the audit/inspection are provided to the facility manager for the necessary corrective action.

The Safety Office will conduct inspections and audits of work operations and facilities to assure a safe working environment for our employees and patrons. Additionally, plans and specifications for new facilities or modifications to existing facilities may be reviewed by the Safety Office to ensure compliance with federal, state, and local occupational safety and health laws.

Relevant federal, state, county, and municipal regulations and ordinances are reviewed by the Safety Office to assess their impact on Commission activities. As regulations and procedures are revised, updated information will be distributed to appropriate Commission personnel.

The Safety Office will evaluate new and improved safety devices and equipment for possible use by the Commission. This evaluation will help ensure compliance with applicable safety standards. If you wish to purchase a safety related device or equipment contact the Safety Office for assistance or research.

Safety Compliance and Training Programs

The Safety Office will assist work units in developing any type of safety or health training as may be required. If assistance is needed, contact a representative of the Risk Management and Safety Office. Safety training is also conducted during the months of October through March for the Maintenance employees and supervisors for the OSHA/MOSH required training. Safety meetings are an essential component for an effective accident prevention program. Each work unit shall establish a program for conducting regular safety meetings. The recommended schedule for safety meetings varies with the degree of accident exposure.

The OSHA Act specifically addresses the responsibility of employers to provide safety and health training to comply with specific occupational safety and health standards promulgated under the OSHA Act. To date, significant number of the Act's current standards contain training requirements. Although the Safety Office provides regular training sessions for various employee groups, section managers must be aware of the mandated safety and health training required for the work performed by their staff. The Safety Office will provide assistance with training or evaluating the need for training, upon request to the Safety Office. New employees must receive general safety training as a part of the new employee orientation. Each work unit shall establish their own new employee safety orientation procedure.

Incentive Awards Program

The Risk Management and Safety Office supports effective incentive safety award programs, which are frequently a means for maintaining employee interest in safety. Since many Commission offices perform a variety of tasks, establishing an overall safety award is impractical.

Individual work units are encouraged to establish safety incentives based on the needs of their work units. The Safety staff will provide support for all incentive programs.

Accident Reporting

It is important that all incidents involving property damage, employee injuries and injuries to the public be reported to the Risk Management and Safety Office. Prompt reporting will greatly aid in the investigation of the accident and reduce the chance of the filing of a lawsuit. Please refer to the Risk Management and Safety Manual for further details on Accident Reporting.

Risk Management and Safety Manual Glossary

Acceptable entry conditions are conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Action Level means the noise level (85 dBA), calculated as an eight-hour, time weighted average, at which OSHA *requires* exposed employees be included in the Hearing Conservation Program.

Actuarial Evaluation- A recognized financial technique for establishing funding for current and future liabilities.

Acute exposures - Exposures, which occur for relatively short periods of time, generally minutes to 1-2 days. Concentrations of toxic air contaminants are high relative to their protection criteria. In addition to inhalation, airborne substances might directly contact the skin, or liquids and sludges may be splashed on the skin or into the eyes, leading to toxic effects.

Acute health hazard means a hazard that usually occurs rapidly following a brief exposure, such as a skin rash or eye irritation.

Additional/named insured provisions that enable a public entity to be named as an additional insured on the third party's coverage. This is important, as it allows the third party's insurance coverage to extend fully to the public entity.

Aerial Devices refers to the following types of vehicle-mounted used to elevate personnel to job sites above the ground:

- Extensible boom platforms
- Aerial ladders
- Articulating boom platforms
- Vertical towers

Aerial personnel lift means any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel. These include extendible boom platforms, aerial ladders, articulating boom platforms, and vertical towers.

Aerial Personnel Lifts means equipment such as powered platforms, vehicle-mounted elevated and rotating work platforms, extendible boom platforms, aerial ladders, articulating boom platforms, vertical towers and powered industrial truck platforms.

Affected Employee means any Commission employee who is not an Authorized Employee but is required to work in the area of equipment/machine/processes where Lockout/Tagout procedures are being implemented.

Alternate procedures space is a permit-required confined space in which the only hazard is atmospheric and where continuous forced air ventilation alone will maintain safe entry.

Anchorage (Anchor Point) means a secure point of attachment for lifelines, lanyards, or deceleration devices that is capable of supporting 5,000 lbs. Per employee or two times the intended impact load, whichever is greater, or for a positioning system supporting 3,000 lbs. Without failure.

ANSI means the American National Standards Institute. Their standards have been adopted throughout government and industry for various types of personal protective equipment.

Approved means, for the purpose of this section, authorized by the Commission, tested and certified by the manufacturer or any recognized national testing laboratory to possess the strength requirements specified in this section.

Approved Disinfectant means a bleach/water solution in a ratio of 1:10 or any commercially available disinfectant such as Betacide or Madacide.

Articulating boom platform means aerial personnel lift with two or more hinged boom sections.

ASTM - Stands for the American Society for Testing and Materials, which provides standards for Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.

Atmosphere - Refers to the air within a confined space. It should be clean, breathable air with enough oxygen for personnel to be able to enter the area, work and breathe.

Attendant - An individual stationed outside the permit-required confined space who is trained as required by this program and who monitors the authorized entrants inside the permit-required confined space and performs all attendants' duties assigned in the Confined Space Entry Program.

Attenuation is the reduction in sound pressure level in dB, which occurs as a person moves further and further away from a noise source (e.g., moving out doors).

Audiogram refers to the chart, graph, or table showing hearing threshold level as a function of frequency; a method of measuring the degree of hearing loss.

Authorized Employee means any Commission employee who utilizes Lockout/Tagout procedures on equipment/machines/processes.

Authorized Entrant - An employee who is trained as required by this program and is authorized to enter a permit-required confined space.

Authorized Person means a person approved or assigned by the employer to perform a specific duty or duties or to be at a specific location or locations at the jobsite.

Authorized Operators refers to an employee who has the education, training and certification to operate aerial personnel lifts.

Backcut (felling cut) means the cut made in a tree limb or tree trunk on the side opposite the intended direction of fall.

Ballistic Nylon is a nylon fabric of high tensile properties designed to provide protection from lacerations.

Baseline Audiogram refers to the audiogram against which future audiograms are compared.

Blanking or blinding - Refers to the absolute closure of a pipe, line or duct by fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage behind the plate.

Blood means human blood, human blood components and products made from human blood.

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Body belt means a strap with the means for securing it around the waist and for attaching it to a lanyard, lifeline, or deceleration (grabbing) device. **Commission employees are not permitted to use body belts.**

Body harness (also referred to as a Full-body harness) means an interconnected set of straps that can be secured on a person in a manner that distributes the fall arrest forces over the thighs, pelvis, waist, chest, and shoulders. It has a means for attaching the harness to other components of personal fall arrest system.

Boom is a metal section or strut, pivoted or hinged at the heel (lower end) at a location fixed in height on a frame or mast or vertical member, and with its point (upper end) supported by chains, ropes, or rods to the upper end of the frame, mast or vertical member.

Brake is a device used for retarding or stopping motion by friction or power means.

Buck means to cut a felled tree into logs.

Bumper [buffer] is an energy absorbing device for reducing impact when a moving crane or trolley reaches the end of its permitted travel; or when two moving cranes or trolleys come in contact.

Butt refers to the bottom of the felled part of a tree.

Cage means a guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side, rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

Ceiling Level - The maximum airborne concentration of a toxic agent to which an employee may be exposed for a specified period of time, usually 15 minutes. At no time must the exposure level exceed the ceiling concentration as listed in 29 CFR Part 1910 Sub Part Z.

Certificate of insurance is a document that provides evidence that insurance is in place to provide coverage for a risk in question. This is usually available from broker/agents and insurance companies.

Chemical means any element, chemical compound or mixture of elements and/or compounds.

Chemical manufacturer means an employer with a workplace where chemicals are produced for use or distribution.

Chemical name means a name that clearly identifies the chemical for the purpose of hazard evaluation.

Chock means a block, often wedged shaped, which is used to prevent movement; a log from rolling, a wheel from turning.

Chronic health hazard means a hazard that is continuous and follows repeated long-term exposure, such as lung cancer or kidney disease.

Class C Respirator includes all half mask and full face negative pressure respirators.

Class D Respirator means an escape respirator only.

Clearance means the distance from any part of the crane to a point of the nearest obstruction.

Cleat means a spacer secured to the side rails between the rungs of a job made ladder.

Code Orange Involves days with *moderately unhealthy* air quality. Temperatures range in the upper 80s to 90s, with light wind. The air quality index values are between 101-150. When the AQI values are within this range, members of sensitive groups may experience health effects. Members of this group should limit prolonged outdoor exertion. The general public is not likely to be affected.

Code Red Involves days with *unhealthy* air quality. Temperatures are generally in the 90s to 100s, with humid stagnant air. The air quality index values range from 151 to 200. When the temperature and AQI approach such levels, everyone may begin to experience health effects. Members of sensitive groups may experience more serious health effects. Subsequently, active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.

Combustible means any material that has the possibility of catching fire or supporting fire such as but not limited to cardboard, wood, saw dust, and chemicals.

Combustible Dust A dust capable of undergoing combustion or burning when subjected to a source of ignition.

Common name means any designation or identification such as a code name, code number, trade name, and brand name or generic name used to identify a chemical by other than its chemical name.

Competent Person (for ladders) means a person possessing the ability to identify hazardous or dangerous conditions and shall have the authorization to take prompt corrective measures to eliminate these conditions. A Competent Person shall know how to detect hidden defects, as well as the proper procedure to follow when equipment is found to be defective.

Competent Person (General Definition) means a person who, because of training and experience, is capable of identifying hazardous or dangerous conditions.

Competent Person (Fall Protection Definition) means an individual knowledgeable (through experience and/or training) of fall protection equipment, including the manufacturer's recommendations and instructions for the proper use, inspection, and maintenance; who is capable of identifying existing and potential fall hazards; who has the authority to take prompt corrective action to eliminate those hazards; and who is knowledgeable of the rules contained in this Program regarding the erection, use, inspection, and maintenance of fall protection equipment and systems.

Composite Structure -Two or more play structures, attached or directly adjacent, to create one integral unit that provides more than one play activity (e.g., combination climber, slide, and horizontal ladder).

Confined Space is defined as:

1. Large enough and so configured that an employee can bodily enter and perform their assigned work.
2. Has limited or restricted means for entry and exit.
3. Is not designed for continuous employee occupancy.

Confined Space - Refers to a space that by its construction or design, has limited openings for entry and exit, has poor natural ventilation, is a space which could contain or produce dangerous air contaminants and which is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, storage tanks, process vessels, pits, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults and pipelines.

Connector means a device that is used to connect parts of a personal fall arrest system together (i.e. D-rings, carabineers and locking snaphooks).

Construction Work means work for construction, alteration, and/or repair to new underground utilities.

Container means a bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.

Contaminant - Any organic or inorganic substance, dust, fume, mist, vapor, or gas, the presence of which in air can be harmful to human beings.

Contaminated means the presence of or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Control Mechanism means any lock or combination of locks, multi-lock hasps and/or other types of special mechanisms (chains, valve covers, breaker covers, etc.) applied to an energy-isolating device to ensure that it cannot be moved or operated.

Controlled Access Zone means an area in which certain work may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.

CPSC - Stands for the U.S. Consumer Product Safety Commission, which provides information in the form of guidelines for Public Playground Safety.

CPSI - Certified Playground Safety Inspectors.

Critical Height - The fall height below which a life threatening head injury would not be expected to occur.

Danger Tree is a standing tree that presents a hazard to employees due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem or limbs, and the direction and lean of the tree.

Decay means disintegration, tearing, cracking, loose, etc.

Deceleration Device means a device manufactured shock-absorbing device whereby the forces of the fall are rapidly reduced to meet acceptable levels.

Decibel (dB) is a unit of measurement of sound levels.

Deck is a stack of trees or logs.

Decontamination means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

Defect means any characteristic or condition that tends to weaken or reduce the strength of the tool, object, or structure of which it is a part.

Design Scale - The proportions or dimensions a piece of equipment, object, area, or structure is designed to in order to facilitate a person of given dimensions to use with ease.

Designated Person is an employee who has the requisite knowledge, training and experience to perform specific duties.

Designated Play Surface - Any elevated surface for standing, walking, sitting or climbing, or a flat surface greater than 2 inches wide having an angle less than 30° from horizontal.

Designed Use - The intended use of a specific area, equipment, or object.

Dielectric is nonconductive of electrical current.

Disability Leave: Benefit overlay paid by the Commission when an employee is unable to return to work due to a work related injury and is considered temporarily and totally disabled.

Domino Felling refers to the partial cutting of multiple trees, which are left standing and then pushed over with a pusher tree.

Dosimeter is a special battery-powered sound level meter that is worn by the worker being monitored for noise exposure. It continuously computes TWA and noise dose using a specified exchange rate for trading sound level and exposure duration. The rate for OSHA is 5 dB.

Drop Line means a vertical lifeline secured to an upper anchorage for the purpose of attaching a lanyard or device.

Drop Started is the act of starting a chain saw by pushing the saw away from the body with one hand while simultaneously pulling on the starter cord handle with the other.

Drum is the cylindrical member around which the ropes are wound for raising or lowering the load.

Electrical Conductor refers to an overhead or underground electrical device, including communications wires and cables, power lines and other such facilities.

Embankment Slide - A slide that follows the contour of the ground and at no point is the bottom of the chute greater than 12 inches above the surrounding ground.

Emergency Notification Plan provides instructions for the notification of appropriate personnel in the event of emergencies.

Emergency stop switch is a manually or automatically operated electric switch to cut off electric power independently of the regular operating controls.

Employee means every laborer regardless of title or contractual relationship.

Employee means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

Employee Exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

Employer means a person engaged in a business where chemicals are used, distributed, or produced for use or distribution.

End-of-service Indicator (ELSI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection.

Energized refers to an item being connected to an energy source or containing residual or stored energy.

Energy Isolating Device means a mechanical device that physically prevents the transmission or release of hazardous energy, including, but not limited to the following: a manually operated electrical circuit breaker; a disconnect switch; line valve; slide gate; or device used to block or isolate energy.

Engineering Controls means any controls that isolate or remove the bloodborne pathogen hazard from the workplace.

Entrapment - Any condition that impedes withdrawal of a body or body part that has penetrated an opening.

Entry permit - A written or printed document that is provided by the employer to allow and control entry into a permit space and contains the information required under 29 CFR 1910.146, *Permit-required confined spaces*.

Entry supervisor - The person responsible for determining if acceptable entry conditions are present at a permit-required space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry.

Exposed Part - A part that may be subjected to the elements and human touch.

Exposure or exposed means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard.

Exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin, or contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

Extension boom platform means an aerial personnel lift (except ladders) with a telescopic or extension boom. Telescopic derricks with personnel platform attachments shall be considered to be an extension boom platform when used with a personnel platform.

Extension Ladder means a non-self-supporting portable ladder adjustable in length. It consists of two or sections traveling in guides or brackets that permit length adjustment. Length is designated by the sum of the lengths of the sections measured along the side rails.

Extension Trestle Ladder means a self-supporting portable ladder, adjustable in length, consisting of a trestle ladder base and vertically adjustable single ladder with the means for locking the ladders together. The length is designated by the length of the trestle ladder base.

Fall Arrest System (Personal) means the use of multiple, approved safety equipment components such as body harnesses, shock absorbing lanyards, deceleration devices, droplines, horizontal and/or vertical lifelines and anchorages, interconnected and rigged to one's body to arrest a free fall.

Fall Distance means the actual distance from the employee's work platform (area) to the level where a fall would stop (ground level or otherwise).

Fall Protection Work Plan means a written planning document in which the employer identifies all areas in the work area where a fall hazard of 6 feet or greater exists, *whereby conventional Fall Restraint and Fall Arrest Systems cannot be utilized.*

Fall Restraint System means an approved device and any necessary components that function together to restrain an employee in such a manner as to prevent that employee from falling to a lower level.

Fastenings means a device to attach a ladder to a structure, building, or equipment.

Fell (fall) means to cut down trees.

Feller (faller) is an employee who fells trees.

First Aid means the following types of treatment:

- Using non-prescription medications at non-prescription strength
- Administering tetanus immunization(s)
- Cleaning, flushing, or soaking wounds on the skin surface
- Using wound coverings, such as bandages, 'BandAids', gauze pads, etc., or using 'SteriStrips' or butterfly bandages
- Using hot or cold therapy
- Using any totally non-rigid means of support, such as elastic bandages, wraps, etc.
- Using temporary immobilization devices while transporting an employee, such as splints, slings, neck collars, or back boards

- Drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters
- Using eye patches
- Using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye
- Using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas OTHER than the eye
- Using finger guards
- Using massages
- Drinking fluids to relieve heat stress

First Responder means any employee who has received accredited training in first aid and cardiopulmonary resuscitation (CPR) and has been designated as a person responsible for rendering immediate first aid assistance to persons who require emergency assistance while on Commission property. (example: Park Police)

Fit Factor means a qualitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit Test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual (see Qualitative Fit Testing and Quantitative Fit Testing).

Fixed Equipment - That which has a fixed position with no moving parts.

Fixed Ladder means a ladder that is permanently attached to a structure, building, or equipment. It cannot be readily moved or carried because it is an integral part of a building or structure.

Footing - A means for anchoring playground equipment to the ground.

Foreseeable emergency means any potential occurrence that could result in an uncontrollable release of a hazardous chemical in the workplace.

Forklift means a mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. Powered industrial trucks (forklifts) are also commonly known as pallet trucks, rider trucks, fork trucks, or lift trucks.

Full Body Harness means a configuration of connection straps to distribute a fall arresting force over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard, lifeline, positioning rings, or deceleration devices.

Full Body Harness System means a Class III full body harness and shock absorbing lanyard attached to an anchorage or attached to a horizontal or vertical lifeline which is properly secured to an anchorage(s) capable of withstanding the forces specified in the applicable sections.

General Use PPE means any PPE that is generally issued to employees for known work site exposures.

Grab bars means individual handholds placed adjacent to or as an extension above ladders for the purpose of providing access beyond the limits of the ladder.

Grade Level - The finished surface or ground level around buildings, play equipment, or other man-made or natural objects.

Ground Personnel refers to a worker or workers assigned to assist and carry out tree work activities on the ground.

Guardrail - An enclosing device around an elevated platform that is intended to prevent inadvertent falls from the platform.

Guardrail means a toprail at forty-two (42) inches high (plus or minus three inches), a midrail installed midway between the top edge of the guardrail system and the surface.

Handlines, Taglines (groundlines) are ropes used for lifting, lowering, or guiding limbs or equipment, or both, into or out of a tree.

Hand-washing Facilities means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

Hardware means snap hooks, D-rings, buckles, carabiners, and adjusters used to attach the components of a fall protection system together.

Hazard Assessment means investigating the work environment for potential dangers, which could result in injury or illness.

Hazard warning means any words, pictures, symbols or combination of words, pictures, or symbols appearing on a label or other appropriate form of warning which convey the specific physical and health hazards.

Hazardous atmosphere An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape from a permit space) injury, or acute illness due to physical or atmospheric and/or environmental conditions.

Hazardous chemical means any chemical that presents a physical hazard or a health hazard.

Hazardous Energy Source means any type of energy that could injure anyone working on or near the equipment/machine/process if released as a result of work activities. Examples of hazardous energy sources include, but are not limited to the following: electrical; hydraulic (fluids/liquids); pneumatic (air); chemical; radiation; thermal; mechanical (from stored energy, like flywheels and springs); and mechanical (from gravity).

Health hazard means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur to exposed employees.

Hearing Loss is defined as the loss of sensitivity of the auditory system, measured in dB below the standard level. Some hearing loss is age-related; some is related to exposure to high levels of noise.

Hearing Protector Devices (HPD) refers to the devices provided to employees to protect their hearing in areas where the noise exposure TWA is 85 plus dB.

Hertz (Hz) is the unit of measurement of frequency, numerically equal to cycles per second.

HIV stands for Human Immunodeficiency Virus.

Hold-harmless agreements are contractual transfers of risk that effectively enable one party to escape potential liability.

Hoist is an apparatus, which may be a part of a crane, exerting a force for lifting or lowering.

Hoist chain means the load bearing chain in a hoist.

Hoist motion means that motion of a crane which raises and lowers a load.

Holding brake is a brake that automatically prevents motion when power is off.

Holes (floor, roof or walking surface) means any opening greater than two inches whereby falling objects or an employee fall of greater than six feet is possible.

Horizontal Lifeline means a rail, rope, or synthetic cable installed in a horizontal plane between two anchorages and used for attachment of an employee's lanyard or lifeline device while moving horizontally.

Hot Work - Any work involving burning, welding, riveting, or similar fire-producing operations, as well as work which produces a source of ignition such as drilling, abrasive blasting and space heating. Permits for **Hot Work** must be obtained in accordance with Commission's Safety and Health Programs.

Hot Work refers to operations including welding, cutting, brazing, use of open torch or similar operations.

Hot Work Area is the area that is exposed to sparks, hot slag, or radiant or convective heat as a result of the hot work.

Hot Work Equipment is electric or gas welding or cutting equipment used for hot work.

Identity means any chemical or common name, which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

Illness can be classified as a skin disease/disorder, respiratory condition, poisoning, or other illnesses resulting from an event in the work environment. Examples include, but are not limited to:

- Contact dermatitis
- Eczema
- Silicosis
- Asbestosis
- Toxic inhalation
- Poisonings by lead, mercury, or other metals
- Poisonings by carbon monoxide, hydrogen sulfide, or other gases
- Poisonings by organic solvents or by other chemicals
- Heatstroke, sunstroke, heat exhaustion, or other heat-related factors
- Freezing, frostbite, or other cold-related factors
- Effects of non-ionizing radiation (welder's flash or lasers)
- Bloodborne pathogenic diseases

Immediately Dangerous to Life or Health (IDLH) - Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects, or that would interfere with an individual's ability to escape unaided from a permit space.

Individual Rung Ladder means a fixed ladder with each rung individually attached to a structure, building, or equipment.

Inerting - Displacement of the atmosphere by a non-reactive gas (such as Nitrogen) to such an extent that the resulting atmosphere is non-combustible. *Inerting an atmosphere produces an IDLH oxygen-deficient atmosphere.*

Infill - Material(s) used in a protective barrier to prevent a user from passing through the barrier, e.g., vertical bars, lattice, solid panel, etc.

Injury means any wound or damage to the body resulting from an event in the work environment. Examples include:

- Cut/laceration

- Puncture
- Abrasion
- Contusion/bruise
- Fracture
- Chipped tooth
- Amputation
- Insect bite
- Electrocutation
- Thermal, chemical, electrical or radiation burn
- Sprain/strain injuries to muscles, joints and connective tissues when the result from a slip, trip, fall or other similar accident

Inspection - To carefully view or examine an area and/or piece of equipment.

Installation - The act of placing a piece of equipment or object in a given location.

Insulated aerial device means aerial personnel lift designed for work on energized lines and apparatus.

Irritant - Any substance that will induce a local inflammatory reaction on immediate, prolonged, or repeated contact with living tissue.

Isolation - A process whereby the confined space is removed from service and completely protected against the inadvertent release of material by the following: blanking off (skillet-type metal blank between flanges), misalignment of sections of all lines and pipes, a double block and bleed system, electrical lockout of all sources of power, and blocking or disconnecting all mechanical linkages.

HBV stands for Hepatitis B virus.

Job Safety Analysis (a.k.a. - JSA) means a systematic process of studying a 'job' (task) so as to define the activities associated with the job, identify the hazards or potential accidents associated with each sequential activity, and to develop solutions that shall eliminate, nullify, or prevent such hazards from causing harm.

Label means any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

Ladder means a tool usually consisting of two side rails joined at regular intervals by crosspieces called steps, rungs, or cleats, on which a person may step in ascending or descending order.

Ladder Safety Device means any device, other than a cage or well, designed to eliminate or reduce the possibility of accidental falls and which may incorporate such features as life belts, friction brakes, and sliding attachments.

Lanyard means a flexible line of webbing, rope or cable (usually in two, four or six foot lengths) used to secure a harness to a lifeline or an anchorage point.

Lavatory means a basin or similar vessel used exclusively for washing of the hands, arms, faces, and head.

Layout - an arrangement or plan of objects or areas.

Leading Edge means the advancing edge of a floor or roof, where a fall of more than six feet is possible to the ground or to another level.

Leg Protection refers to a garment designed to provide protection to the legs during chain saw operations.

Licensed Healthcare Professional means a person whose legally permitted scope of practice allows him or her to independently perform the activities required to provide the Hepatitis B Vaccinations and conduct the Post-exposure Evaluations and Follow-ups.

Lifeline (vertical or horizontal) means a vertical line from a fixed overhead anchorage or horizontal line between two horizontal anchorages, independent of walking or working surfaces, to which a lanyard or device is secured.

Limbing refers to cutting branches off felled trees.

Load means the total superimposed weight on the load block or hook.

Load block is the assembly of hook or shackle, swivel, bearing, sheaves, pins, and frame suspended by the hoisting rope.

Lockout means the placement of a control mechanism on an energy-isolating device that ensures that the equipment/machine/process being worked on cannot be operated/initiated until the control mechanism is removed.

Loose-Fill Surfacing Material - A material used for protective surfacing in the use zone that consists of loose particles such as sand, gravel, wood fibers, or shredded rubber.

Lower Explosive Limit (LEL) - The minimum concentration of a combustible gas or vapor in air (usually expressed in percent by volume at sea level) that will ignite if an ignition source (sufficient ignition energy) is present.

Main switch is a switch controlling the entire power supply to the crane.

Maintenance - To keep an area or equipment operating in a safe and pleasing condition at all times.

Manufacturer - the maker or producer of equipment or objects by hand or machinery.

Material Safety Data Sheet (MSDS) means written or printed material concerning a hazardous chemical.

Medical Treatment means the managing and caring for a patient for the purpose of combating disease or disorder. The following activities are NOT medical treatment:

- First aid
- Visits to a doctor solely for observation or counseling
- Diagnostic procedures, including the administering of prescription medications that are used solely for diagnostic procedures

Mobile Crane refers to a machine for lifting and lowering a load and moving it horizontally, with the hoisting mechanism an integral part of the machine. It is mobile lifting equipment with 2000 pounds or more of lifting capacity, excluding forklifts, boom trucks, tower cranes and digger derricks.

Mushroomed refers to a condition that develops from constant hammering on the heads of the chisels and wedges that causes the metal to spread outward, fold under and splinter off.

Negative Pressure Respirator means a respirator, which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Noise Dosimeter is an instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

Noise Reduction Rating (NRR) is the HPD manufacturer's single number attenuation rating based on idealistic laboratory measurements across a range of frequencies.

Non-Employee Injuries - Injuries involving the general public, including patrons and visitors.

Non-Rigid Component - A component of playground equipment that significantly deforms or deflects during the normal use of the equipment.

NPSI - National Playground Safety Institute.

Number of employees means, unless otherwise specified, the maximum number of employees present at any one time on a regular shift.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane, or contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Operation Device means any switch, button, lever, valve, etc., that are expressly intended for the starting or initiation of the equipment/machine/process.

OSHA Form 300 (Log of Work-Related Injuries and Illnesses) - A form that is used to classify work-related injuries and illnesses and to note the extent and severity of each case.

OSHA Form 300A (Summary of Work-Related Injuries and Illnesses) - A form that shows the totals for the prior calendar year in each category from the OSHA Form 300.

OSHA Form 301 (OSHA's Injury and Illness Incident Report) - The first form that must be filled out when a recordable work-related injury or illness has been determined, unless the State First Report of Injury contains all of the same information.

Other Personnel means non-Commission personnel or visitors to any work area where Commission authorized employees are utilizing processes outlined in the Program.

Other Potentially Infectious Materials (OPIM) means:

The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between bodily fluids; and

Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

Outrigger is a built-in device used to stabilize cranes, aerial lifts, and similar equipment.

Overhead crane means a crane with a movable bridge carrying a movable or fixed hoisting mechanism and traveling on an overhead fixed runway structure.

Oxygen Deficiency - Refers to an atmosphere that is lacking sufficient oxygen. *An oxygen-deficient atmosphere is one with less than 19.5% Oxygen.*

Oxygen Deficient means an atmosphere with oxygen content below 19.5% by volume.

Oxygen-Enriched Atmosphere – Refers to an atmosphere that has too much oxygen. *An oxygen-enriched atmosphere is one with greater than 23.5% Oxygen.*

Permissible Exposure Limit (PEL) is the eight-hour, time-weighted average noise level that must not be exceeded. The OSHA PEL is 90 dBA per 8-hour day with a 5 dB exchange rate.

Permissible Exposure Limit (PEL) - The maximum eight-hour, time-weighted average of any airborne contaminant to which an employee may be exposed. At no time must the exposure level exceed the Ceiling concentration for that contaminant as listed in 29 CFR Part 1910 Subpart Z.

For the purpose of this program, the Commission's Permissible Exposure Limits are 50% of either the OSHA Permissible Exposure Limits or ACGIH Threshold Limit Values for a particular contaminant - the lower of the two.

Permit-Required Confined Space is one that meets the definition for a Confined Space and has one or more of the following characteristics:

- Contains or has potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or by a floor which slopes downward and tapers to a smaller cross section; or,
- Contains any other recognized serious safety or health hazard.

Personal Protective Equipment means devices worn by employees to protect them against hazards in the environment. Examples include safety glasses, face shields, respirators, gloves, welding (apron, sleeves, chaps) hard hats, work boots and hearing protection.

Physical Hazards means a chemical that acts outside the body to produce a dangerous situation. Flammable or explosive chemicals pose physical hazards.

Pitch means the included angle between the horizontal and the ladder, measured on the opposite side of the ladder from the climbing side.

Platform means any personnel-carrying device (i.e. basket or bucket) that is a component of an aerial personnel lift.

Platform and **Work Platform** means a work surface elevated above lower levels. Platforms can be constructed using individual wood planks, fabricated planks, fabricated decks, and fabricated platforms.

Platform Ladder means a self-supporting ladder of fixed size with a platform at the working level.

Positioning Device System means a body harness rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Positive Pressure Respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air-purifying element outside the respirator.

Potable Water means water that meets the quality standards prescribed in the U.S. Public Health Service Drinking Water Standards, published in 42 CFR part 72, or water which is approved for drinking purposes by the State or local authority having jurisdiction.

Power-operated crane means a crane whose mechanism is driven by electric, air, hydraulic, or internal combustion means.

Preschool-Age Children - Children 2 years of age through 5 years of age.

Projected Dose - Projects an 8-hour dose from the sample obtained in less than 8 hours.

Property Damage - Damage to Commission property or property of a third party.

Protective Barrier - An enclosing device around an elevated platform that is intended to prevent both inadvertent and deliberate attempts to pass through the barrier.

Protective Surfacing - Surfacing material in the use zone that conforms to the recommendations.

Purging - The method by which gases, vapors or other airborne impurities are displaced from a confined space. For example, an atmosphere may be purged of a hazardous airborne contaminant by forced ventilation, followed by atmospheric or environmental testing to ensure effectiveness.

Qualified Person is one who, by possession of a recognized degree, certificate, or professional standing, or who, by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.

Qualified Person - A person designated by the employer, in writing, as capable (by education and/or specialized training) of anticipating, recognizing and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person must be capable of specifying necessary control and/or protective action to ensure worker safety.

Qualified Person means an individual with a recognized degree or professional certificate and extensive knowledge and experience in the subject field who is capable of design, analysis, evaluation and specifications in subject work, project or product.

Qualitative Fit Testing means a pass/fail test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative Fit Testing means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Rail Ladder means a fixed ladder consisting of side rails joined at regular intervals by rungs or cleats and fastened in full length or in sections to a building, structure, or equipment.

Railing means a vertical barrier erected along exposed edges of floor openings, wall openings, ramps, platforms, and runways to prevent the fall of persons.

Rated load means the maximum load for which a crane or individual hoist is designed and built by the manufacturer and shown on the equipment nameplate(s).

Rated Load means the manufacturer's specified maximum load to be lifted by the hoist or to be applied to a scaffold or scaffold component.

Respirator (Approved) - A device which has met the requirements of 30 CFR Part 11 and is designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the Bureau of Mines and the National Institute for Occupational Safety and Health, and the Mine Safety and Health Administration (formerly Mining Enforcement and Safety Administration).

Responsible party means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Responsible Person (Personnel) means any person or persons trained in the control of disinfection procedures and disposal procedures of equipment, product or materials suspected to be contaminated with Bloodborne Pathogens. (e.g., custodians)

Restraint Line means a line from a fixed anchorage or between two anchorages to which an employee is secured in such a way as to restrict the employee from reaching a point where falling to a lower level is possible.

Restricted Work means activities where a doctor keeps, or recommends keeping, an employee from doing the routine functions of their job or from working the full workday that the employee would have been normally scheduled, before the injury/illness.

Risk Assessment The rating of activities to determine the probability of their causing frequent damage or claims against the Commission, catastrophic losses, or a combination of these two probabilities.

Risk Avoidance - Eliminating a high-risk activity, or disposal of a high-risk facility, in order to prevent any claim arising against the Commission from the activity, or facility.

Risk Management - The process of making and carrying out decisions that will minimize the adverse effects of accidental losses. Risk management involves evaluating the history of losses and risk probability, then designing countermeasures for preventing or limiting the degree of loss. Countermeasures include: identification of potential loss exposure; risk avoidance; design and implementation of safety and loss control programs, to include maintenance standards; changes in public services; security measures; pre-employment evaluations of Commission employees; medical monitoring; drug and alcohol-free workplace initiatives; transfer of risk through self-insurance and commercial insurance programs.

Risk Management Fund - An internal service fund, funded by budgeted revenue transfers from operating departments to pay for costs or losses associated with the administration of self-insurance, commercial insurance, and reserves.

Risk Retention - When an organization knowingly or unknowingly retains losses using funded or unfunded reserves, operating expenses, or simply borrows to pay for losses that occur.

Risk Transfer - Shifting of the financial burden of losses from one party to another through commercial insurance or written contracts and agreements.

Roller Slide - A slide that has a chute consisting of a series of individual rollers over which the user travels.

Rope refers to wire rope, unless otherwise specified.

Rotating Equipment - That which has a fixed position but which rotates or turns around a center point.

Rungs are ladder crosspieces of circular, oval, or semi-square cross-section on which a person may step in ascending or descending.

Running sheave means a sheave, which rotates as the load block is raised or lowered.

Safe Equipment - A piece of equipment, object or area, which is relatively free from harmful or injurious parts, or objects, which may be fixed or moveable.

Scaffold, Scaffolding and Scaffold Assembly means any temporary elevated platform (supported or suspended) and supporting structure (including points of anchorage) used for supporting personnel or materials or both.

Scaffold Builder means a Competent Person who is trained to erect, modify, repair, and dismantle scaffold assemblies.

Scaffold User means a person who uses a scaffold assembly to gain access to an elevated position in order to perform their work.

School-Age Children - Children 5 years of age through 12 years of age.

Sectional Ladder means a non-self-supporting portable ladder, nonadjustable in length, consisting of two or more sections that function as a single ladder. The length is designated by the overall length of the assembled sections.

Self-Insurance Program - Provides protection against risks and losses by setting budgeted departmental contributions to the Risk Management Fund; funding of third-party administrator determined case reserves; funding actuarially determined reserves which are incurred but not reported (IBNR) reserves; and funding Commission determined retained earnings reserves.

Self-retracting Lifeline/Lanyard means a deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal movement and which, after onset of a fall, automatically locks the drum and arrests the fall (within two feet or less).

Service Work means work for alteration and/or repair of existing underground utilities.

Shock Absorbing Lanyard means a flexible line of webbing or rope used to secure a harness to a lifeline or anchorage point that has an integral shock absorber of either a rip-stitch or retractable configuration.

Side-step Ladder means a ladder in which an individual getting off the top must step sideways in order to reach the landing.

Single Ladder means non-self-supporting portable ladder, nonadjustable in length, consisting of only one section. The overall length of the side rail designates its size.

Slide Chute - The inclined sliding surface of a slide.

Sliding Equipment - That which has a fixed position but which has a portion or part used for sliding.

Snaphook means a 'locking' hook at the end of a lanyard or restraining/positioning line that has a double-action locking mechanism intended to eliminate unintentional unhooking from the D-ring of a body harness. Non-locking snaphooks are prohibited.

Sound Level Meter is the basic instrument used to measure sound pressure variations in air.

Source Individual means any individual, living or dead, whose blood or other potentially infectious materials may be the source of occupational exposure to the employee.

Special Purpose Ladder means a portable ladder which represents either a modification or a combination of design or construction features in one of the general-purpose types of ladders previously defined, in order to adopt the ladder to special or specific uses.

Stepladder means self-supporting portable ladder, nonadjustable in length, having flat steps and a hinged back. Length is designated by the overall length of the ladder measured along the front edge of the side rails.

Steps mean flat crosspiece of a ladder on which a person may step in ascending or descending order.

Stop is a device to limit travel of a trolley or crane bridge. This device normally is attached to a fixed structure and normally does not have energy absorbing ability.

Stationary Play Equipment - Any play structure, which does not move or does not have components that move during its intended use.

Sub grade - The local material (soil) on which a complete surface material is placed.

Subrogation - The recovery of damages from a third party whose negligent acts may have caused injury to Commission employees or property, and for which the Commission was obligated to pay, in the form of paid leave and insurance benefits, or through reconstruction and repair.

Subsurface - The surface being under the grade level or finished surface.

Supporting Member - Load-bearing member of a structure.

Surface - Area under and around playground equipment.

Swinging Equipment - That which has a fixed position but which has swinging parts.

Through ladder means a ladder from which a person getting off at the top must step through the ladder in order to reach the landing.

Time-Weighted Average (TWA): The sound level, which, if constant over an eight-hour exposure, would result in the same noise dose as is measured.

Toeboard means a barrier at the base of the guardrail system to prevent material and objects from falling off the surface. They are at least four (4) inches of nominal height with no less than one (1) inch clearance from the surface.

Tot Swing - A swing generally appropriate for children under 4 years of age that provides support on all sides of the occupant.

Traffic Pattern - The consistent flow of traffic, running or walking, through a given area.

Tread means the horizontal member of a step.

Tread width means the horizontal distance from the front to the back of the tread including nosing.

Trestle Ladder means a self-supporting portable ladder, nonadjustable in length, consisting of two sections hinged at the top to form equal angles with the base with rungs on each side. The size is designated by the length of the side rails measured along the front edge.

Trolley is the unit, which travels on the bridge rails and carries the hoisting mechanism.

Tube Slide - A slide in which the chute consists of a totally enclosed tube or tunnel.

Undercut refers to a notch cut in a tree to guide the direction of the tree fall and to prevent splitting or kickback.

Unitary Surfacing Material - A manufactured material used for protective surfacing in the use zone that may be rubber tiles, mats or a combination of rubber-like materials held in place by a binder that may be poured in place at the playground site and cures to form a unitary shock-absorbing surface.

Universal Precautions means an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens.

Unprotected Sides and Edges means any side or edge (except at entrances to points of access) of a floor, roof, ramp, or runway where there is no wall or guardrail system.

Upper Body Equipment - Equipment designed to support a child by the hands only (e.g., horizontal ladder, overhead swinging rings).

Use means to package, handle, react, emit, extract, generate a byproduct, or transfer.

Use Zone - The surface under and around a piece of equipment onto which a child falling from or exiting from the equipment would be expected to land.

Vandalism - Deliberately mischievous or malicious destruction or damage of property.

Vertical Tower means aerial personnel lift designed to elevate a platform in a substantially vertical axis.

Walking/Working Surface means for the purpose of this program, any area whose dimensions are 45 inches or greater in all directions through which employees pass or conduct work, and can include scaffolding and aerial lifts regardless of surface dimensions.

Wall Opening means a gap in a wall where the outside bottom edge is 6 feet or more above lower levels, and the inside bottom edge (e.g. parapet wall) is less than 39 inches above walking/working surface.

Well means a permanent complete enclosure of at least three sides or gated around a fixed ladder, which is attached to the walls of the well. Proper clearances for a well will give the person who must climb the ladder the same protection as a cage.

Work Area means that portion of a walking/working surface where work activities are being performed.

Work area means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Work Environment includes all work sites where one or more employees are present as a condition of their employment.

Workplace means an establishment, job site, or project, at one geographical location containing one or more work areas.

Work Practice Controls means controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

Work-related Injury or Illness means an injury or illness resulting from an event or exposure in the work environment causing or contributing to the condition or significantly aggravating a preexisting condition.

Yarding refers to the movement of logs from the place they are felled to a landing.

Zero Energy State means equipment/machine/process has been purged of and blocked from hazardous energy sources; that is, no hazardous energy is present.