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HEALTH AND SAFETY MANUAL

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HEALTH AND SAFETY MANUAL

ESSEX COUNTY
HEALTH & SAFETY PROGRAM

STATEMENT OF SAFETY POLICY

It is the policy of Essex County to establish and maintain a reasonably safe work place where most (if not all) injuries can be prevented, where every employee accepts and assumes responsibility for the safety of themselves and other employees at the work site, and where job hazards and exposures are controlled or eliminated to the extent reasonably possible prior to commencement of work. Essex County is committed to furnishing each and every County employee with appropriate safety training so that employees can perform their work duties in a safe environment and in compliance with applicable safe work procedures

INTRODUCTION

Purpose & Scope

1. This manual is designed to be a guide for all Essex County officials and employees in their efforts to make County workplace environments as reasonably safe and injury-free as possible.

2. Section 1 of this manual contains the County's statement of its safety policy. All the other sections in this manual outline the specific program guidelines which the County has established to achieve the goal of a reasonably safe work environment, and the purpose of these guidelines is to outline and establish systems designed to eliminate unsafe work behaviors.

3. Workplace injuries cause the County to incur additional costs in workers' compensation expense and the expense of replacement employees including overtime. An effort to prevent and reduce workplace injuries not only helps promote the health of our employees but fiscal responsibility as well.

Responsibility

1. The responsibility for a safe work environment lies with every official and employee at a County work site:
    a. from the department heads and supervisors who make and schedule work assignments and tasks;
    b. to supervisory staff who have control over a work area or portion thereof or over employees within a work area;
    c. to the employees who control the work assignments, set-ups, conduct and pace of work;
    d. to the employees who operate the equipment and perform the work.
2. Failure to comply with these guidelines by any official or employee may be cause for disciplinary action.

Principles

1. Studies show that most work-related injuries are caused by the unsafe behavior of a person or persons at work, and therefore one of the primary focuses is to manage the behavior of employees as they are working.

2. Management is responsible for providing direction, objectives, resources, training and support -- so that employees are familiar with safety practices and procedures and that unsafe practices and procedures are identified and corrected.

3. Employees are responsible and accountable for following prescribed safe work practices and for using prescribed and/or available safety equipment.

Safety performance:

1. Will be measured not only in terms of goal achievement, but also in terms of activities such as:
   - supervisory and employee orientation,
   - inspections, training, and safety meetings,
   - enforcement of safe work procedures,
   - confronting and changing unsafe behavior, and
   - completion of safety action plan items.

2. Depends upon a pro-active, rather than a reactive, safety program which recognizes:
   - behavior prior to injury must be managed, and
   - injuries may be predicted by observing behavior and can be prevented by management of behaviors.

ROLES AND RESPONSIBILITIES

Regulation

ROLES AND RESPONSIBILITIES: GOOD MANAGEMENT PRACTICE

Review Dates

LAST REVIEW DATE – 09/12/04

Guideline

1. The safety and health program relies on the fact that all levels of employment have roles and responsibilities with regards to workplace safety and health. These safety and health roles and responsibilities are required as part of each employees job function.
2. The following safety and health roles and responsibilities have been assigned:

Position	Responsibilities
County Safety and Health Coordinator or Designated Representative(s)	• Establish the provisions of the health and safety program. • Ensure the provisions of the health and safety program are being implemented and focused in the right direction. • Coordinate the program with each of the Department Heads or designated Department Safety Coordinators. • Act as the technical safety and health resource. • Coordinate all health and safety activities. • Continually evaluate the effectiveness of the program.
Department Heads or designated Department Safety Coordinator	• Support the safety and health program for the department. • Understand the safety and health policies and guidelines applicable to the department. • Implement the safety and health provisions for the department. • Actively participate in the safety and health program. • Facilitate employee involvement and participation in the program.

All Employees	• Understand the safety and health policies and guidelines applicable to their department and specific job. • Actively participate in the safety and health program. • Follow established safety and health policies and guidelines. • Immediately report any work related injuries and illnesses or safety and health issues to the Department Head or designated Department Safety Coordinator.

3. As part of these roles and responsibilities, all employees will also be responsible to ensure and comply with basic safety guidelines. These guidelines are provided in Appendix A.
4. Management and employees will be held accountable for complying with these safety and health roles and responsibilities as noted in the Essex County Employee policy Manual (Chapter 9 – Disciplinary Actions).

SAFETY COMMITTEE

Regulation

SAFETY COMMITTEE: GOOD MANAGEMENT PRACTICE

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. An active safety committee is an integral aspect to the success of the safety and health program. A working safety committee promotes a sense of employee pride and ownership, teamwork between the County and CSEA employees, the employee's "prospective", and active participation in the safety and health program.
2. The safety committee is established according to the guidelines of the Agreement between Essex County and the CSEA.
3. The safety committee consists of members from Essex County and the CSEA. Seven (7) members representing the CSEA include one (1) member from the following departments: Public Works, Horace Nye, Sheriff, Social Services, Public Health, Fisheries and an at-large member from one (1) of the remaining departments. Up to three (3) members will be selected by Essex County.
4. The Safety Committee members for Essex County are provided in Appendix A.
5. The Safety Committee will meet on an as needed basis, preferably at a set date and time. Meeting dates will be coordinated between the County and CSEA.
6. The purpose of the Safety Committee will be to make recommendations to the various departments regarding safety matters.
7. Minutes from the meeting will be collected and made available to all employees of Essex County.

Department Safety Coordinators Meeting

1. Department Safety Coordinators Meeting will be held at a set place and time to be determined.

APPENDIX A

Safety Committee Members

Essex County
Safety Committee Members

Representing	Name	Phone #	e-mail
Essex County			
Essex County			
Essex County			
Public Works			
Horace Nye			
Sheriff			
Social Services			
Public Health			
Fisheries			
Youth Bureau			

Workplace Inspection and Program Evaluation

Regulation

WORKPLACE INSPECTION AND PROGRAM EVALUATION: OSHA (MULTIPLE REGULATIONS)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for workplace inspection and program evaluation have been established to ensure the safety of the workplace and continuous improvement of the written safety and health programs and guidelines.

Workplace Inspections

1. Each department will be responsible to conduct a monthly safety and health inspection. The inspection will be a visual assessment of the safety and health conditions of the workspace and operations affiliated with the department.
2. The Department Head or designated Department Safety Coordinator will be responsible for coordinating these workplace inspections.
3. The criteria for the inspections have been developed for each specific department or group of departments. These inspections are provided in Appendix A. The appropriate inspection to be used by the department is listed below:

1.1 DEPARTMENT	Inspection
Auditor, Board of Elections, Board of Supervisors, County Attorney, County Clerk, County Manager, Emergency Services, Information Systems, Mental Health, Motor Vehicles, Office of Aging, Personnel, Planning, Probation, Public Health, Real Property, Sheriff, Social Services, Treasurer, Veterans, V&M and Youth Bureau	Office Safety Inspection
Fisheries, Horace Nye, Printing Shop and Public Works	Office Safety Inspection and Shop Safety Inspection

4. The Department Head or designated Department Safety Coordinator will be responsible for establishing corrective action to fix any findings from the inspections.

- Immediate Fix – Findings that can be fixed immediately should be conducted on the spot, such as clearing material storage from in front of a fire extinguisher.
- Service Required Fix – Findings that require additional service to fix will be coordinated with the Department of Public Works for repair, such as a light out on an emergency exit.

5. When findings cannot be corrected immediately and present a hazard to employees, the following will be conducted:
   - Areas will be protected from employee contact.
   - Temporary, but effective, actions will be put in place to control the issue until permanent actions can be completed.
   - Machinery or equipment will be taken out of service.
   - Other means to prevent employees from injury.
6. As part of the corrective actions, the Department Head or designated Department Safety Coordinator should work with their department to remedy any findings resulting from unsafe acts. Such as, communicating the need to keep fire extinguishers clear for access.
7. The Department Head or designated Department Safety Coordinator will follow up with any finding and corrective actions as part of the next month's workplace inspection.
8. Records of the workplace inspection will be maintained by the individual department.

Program Evaluations

1. Program evaluations are utilized to measure the effectiveness of the overall safety and health program. These evaluations focus on:
   - Evaluating the program for compliance with applicable guidelines and measure against anticipated program goals.
   - Evaluate program guidelines in place to determine if they are in compliance with regulatory requirements and reflect the current practices in the departments.
2. Program evaluations include, but are not limited to:
   - Review of programs, records and documentation.
   - Review of injury and illness trends.
   - Review of periodic inspections.
   - Observation of work practices.
   - Interviews with management and employees.
   - Review of OSHA standards.
3. Program evaluations will be conducted on an annual basis by a team of representatives, which may include:
   - Selected Department Heads or designated Department Safety Coordinators (i.e., Public Works, Public Health, Emergency Services, Personnel, etc.)

- Safety committee members.
- Outside safety and health consultants.

4. Findings from the program evaluation will be documented and incorporated into the established safety and health policies and guidelines.

APPENDIX A:

Department Safety Inspections

Department:_____ Inspector:_____ Date:_____

Safety Issue	Findings	Immediate Fix/Service Required
Means of Egress/ Fire Protection: o All evacuation routes, exits, fire extinguishers and other fire protection equipment are clear for ready access? o All emergency exit routes properly labeled or identified? o All illuminated exit signs and emergency lighting is functioning and properly illuminated? o Fire extinguishers are positioned in their designated location and charged? o Excessive accumulation of combustible material is controlled around the area?		
Housekeeping/Working Surfaces: o All floors and work areas are clean and free of accumulation of debris? o Stacked materials and equipment are securely stored? o All floors and working surfaces are in good repair to prevent slip, trip and fall hazards?		
Electrical: o All electrical control panels are closed? o Areas in front of all electrical control panels have at least 3 feet of clearance? o Electrical cords and plugs are in good condition and not being used as permanent fixtures? o All electrical equipment/installations are in good repair (outlet covers, wiring, etc.)?		

Chemical Use: o All chemical containers are properly labeled and stored? o MSDS binders are up to date and accessible to employees?		
Machine Guarding: o All guards on machinery or equipment are in place?		
Personal Protective Equipment: o Appropriate personal protective equipment is available and used, as necessary?		
Safety Issue	Findings	Immediate Fix/Service Required
Means of Egress: o All evacuation routes and exits are clear for ready access? o All emergency exit routes properly labeled or identified? o All illuminated exit signs are properly functioning (illuminated)? o Emergency lighting is in good condition and functioning?		
Fire Protection: o Fire extinguishers are in their designated location and charged? o Areas around fire extinguishers or other fire protection equipment are readily accessible? o Combustible material accumulation is controlled around the area?		
Housekeeping: o All floors and work areas are clean and free of accumulation of debris? o Stacked materials and equipment are securely stored? o Slip, trip and fall hazards are controlled?		

Safety Issue	Findings	Immediate Fix/Service Required
Electrical: o All electrical control panels are closed? o All circuits/circuit breakers are labeled with the circuits controlled? o Areas in front of all electrical control panels have at least 3 feet of clearance? o Electrical cords and plugs are in good condition, including the grounding prong? o Extension cords are not being used as permanent fixtures? o GFCI's are used with all extension cords and portable tools? o All circuits/circuit breakers are labeled with circuits controlled. o All electrical equipment/installations are in good repair (outlet covers, wiring, conduit, etc.)		
Machine Guarding: o All belts, pulleys, drive shafts, couplings, pinch points and moving parts on the machine, equipment and tools are properly guarded? o Machine guards are in place and properly positioned? o Machine guards are in good condition? o Grinders are set up properly (1/8" - tool rest to wheel and 1/4" tongue guard to wheel)? o Portable hand tools are in good condition?		

Personal Protective Equipment: o Safety glasses are worn in required areas? o Other personal protective equipment (gloves, face shields, hard hats, etc.) is available and used as required? o Personal protective equipment is in good condition and stored in a clean and dry location? o Respiratory protection, if applicable, is in good condition and stored in a clean and dry location?		
Eye Wash/Shower Stations: o Areas around eye wash and shower stations are clear and readily accessible? o Eye wash/shower stations are clean and inspected?		
Chemical Use: o All chemical containers are properly labeled? o MSDS binders are up to date and accessible to employees? o All flammable and corrosive liquids are stored in proper containers and cabinets? o All compressed gas cylinders are properly secured with caps in place? o All compressed gas cylinders are stored in their designated location (oxygen away from flammables)?		
Working Surfaces: o All floors and working surfaces are in good repair to prevent slip, trip and fall hazards? o All ladders are in good condition? o All elevated working/climbing surfaces are clean and secure?		

o All railings and midrails are in place on all platforms or elevated surfaces?		
Heavy Equipment and Fork Trucks: o Heavy equipment and fork trucks are in good working order. o Heavy equipment and fork trucks are inspected and documented each shift. o Operators are safely using the heavy equipment and fork trucks.		

Safety Training

Regulation

SAFETY TRAINING: OSHA (MULTIPLE REGULATIONS)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. All employees in Essex County have exposure to general health and safety hazards in their work environment, while certain job tasks have additional safety and health hazards specific to their job. In order to make employees aware of these hazards and methods to protect themselves, all employees will participate at various levels in the safety training program.

Safety and Health Training

1. To effectively determine the safety training necessary for all County employees, a training needs assessment has been conducted. The needs assessment identifies all county departments and the training required as part of each job classification. The training needs assessment is provided in Appendix A.
2. Based on the safety training needs assessment, the following topics have been identified for safety training programs:
   - Basic Safety/New Employee Orientation.
   - Emergency Preparedness and Fire Protection.
   - Hazard Communication.
   - Bloodborne Pathogens. (As Needed)
   - Personal Protective Equipment.
   - Respiratory Protection.
   - Confined Space Awareness.
   - Lockout/Tagout - Authorized Personnel/Awareness Level.
   - Hearing Conservation.
   - Powered Industrial Trucks. (As Needed)
   - MSHA (Part 46). (Conducted by DOL)
3. Additional job-specific training will be provided, as necessary:
   - Department Safety Inspections
   - Accident Investigation
   - OSHA Competent Person
   - Excavation and Trenching Safety
   - Ladder and Scaffolding Safety

- Work at Elevated Heights/Fall Protection
- Electrical Safe Work Practices
- Hot Work Activities
- Asbestos/Lead Awareness
- Cranes, Hoists and Slings
- Lifting Safety
- Office Workstation Design

4. The Department Head or designated Department Safety Coordinator will be responsible for ensuring that all their department employees attend the required training classes.

Basic Safety/New Employee Orientation

1. Regardless of their job, all County employees will participate in basic safety training. This basic safety training will introduce all employees to the basic safety guidelines of their job. All new employees will be introduced to the basic safety training as part of the New Employee Orientation training.
2. The following topics will be covered in the basic safety/new employee orientation training:
   - County safety and health program.
   - General safety and health guidelines.
   - Emergency Preparedness and Fire Protection Program.
   - Hazard Communication Program.
   - Awareness to other safety and health programs including confined space awareness, lockout/tagout, asbestos/lead awareness, personal protective equipment, electrical safety and bloodborne pathogens.
   - Accident and injury reporting guidelines
   - Access to medial and exposure records.
3. Basic safety/new employee orientation will be conducted on a monthly basis.
4. In the interim until the next basic safety/new employee orientation class, the Department Head or designated Department Safety Coordinator will be responsible for review the basic safety information for the department with the employee. This Basic Safety Review form summarized the required information for the review and is presented in Appendix B. Once the review is complete, this form is signed by the Department Head or designated Department Safety Coordinator and the employee and filed in the employee's personnel file. The employee should attend the next basic safety/new employee orientation training.

Additional Training Groupings

1. In order to address all the necessary training topics, several training groupings have been established to cover specific areas of departments and job classifications. These training groupings are established as follows:

Training Grouping	Topics Covered
Department Head/Department Safety Coordinator	• Accident Reporting and Investigation • Department Safety Inspections • Emergency Preparedness • New Employee Training
OSHA Construction Safety Training Segments	• Electrical (Subpart K) • Hazardous Materials (including Lead and Asbestos) • Welding and Cutting (including Hot Work Activities) • Excavation (Subpart P) • Scaffolds (Subpart L) • Fall Protection (Subpart M) • Ladders and Stairways (Subpart X) • Hand and Power Tools (Subpart I)
Competent Person	• Excavation and Trenching • Scaffolding Safety • Fall Protection • Asbestos • Lead

Training Program Content and Schedules

1. Training programs presented to employees are designed to comply with regulatory requirements as detailed in an OSHA standard and to provide specific information regarding the application of this training in Essex County operations.
2. Details on the content of each training program are provided in the written program or guideline developed specifically for that topic, such as Hazard Communication and Emergency Preparedness and Fire Protection.
3. Training is conducted based on the following general schedule:
   - At the time of their initial job assignment, or transfer into an area requiring specific training.
   - On a periodic basis, annual or as required by health and safety regulations.
   - As needed, to continually ensure employees understand the training presented to them and demonstrate this understanding by their work practices.
4. The County will develop an annual training schedule to accomplish the required level of training. The training schedule is presented as Attachment C.

On the Job Training

1. In addition to the formal training presentations provided to employees, health and safety topics are continually emphasized during on the job training where employees work with management or experienced employees to learn their daily work procedures.

2. Although this training is not formally documented, knowledge of the proper health and safety procedures is an important factor in evaluating overall job performance of new and existing employees.

Training Documentation

1. All safety and health training presented to Essex County personnel will be documented on a Safety and Health Training Sign-In Form. This roster identifies the subject of the training, the trainer and the date of training. The name of the employee is completed by each person attending the training session. The sign-in form is presented in Appendix D.
2. All completed sign-in forms are maintained on file by topic area. All training records are maintained by the County Safety Coordinator.
3. Additional training documentation may be placed in each individual's personnel file or otherwise maintained by the Department Safety Coordinator.

APPENDIX A

Basic Training Review

Department:_____ **Date:**_____

Employee's Name:_____ **Job Title:**_____

Safety and Health Review for **ALL** Employees	Completed
1. Review general safety and health rules for the County and department.	o Yes
2. Review the Accident Reporting Guideline: • Employees are required to report any accident and injuries, regardless of severity, to the Department Head or designated Department Safety Coordinator immediately.	o Yes
3. Review Employee Access to Medical and Exposure Records: • Employee's right to access records. • Existence, location, availability and means of accessing records.	o Yes
4. Review Department Emergency Procedures: • Means to be notified of and report workplace emergencies. • Evacuation routes, exit and employee meeting areas. • Available emergency equipment in the department • Prohibited use of fire extinguisher until trained.	o Yes
5. Review Hazard Communication Guidelines: • Understanding container labeling. • Use and location of Material Safety Data Sheets (MSDSs).	o Yes
6. Provide Awareness Training: • Bloodborne – Do not touch blood or other potentially infectious materials without the use of protective equipment. • Lockout/Tagout – Do not remove locks or tags on machine controls for any reason. • Electrical – Do not conduct any work on electrical services, outlets, switches, plugs, etc. • Confined Space – Do not enter confined spaces (manhole, tanks, sewer, etc.) under any circumstances. • Lead/Asbestos – Do not conduct any destructive activities on any painted surfaces or potential asbestos containing materials (i.e., pipe insulation, floor tiles, etc.).	o Yes

Safety and Health Review for Department Specific Applications	Completed
7. Review the safety and health procedures specific to the employee's job: • Safety and health hazards. • Safety equipment and personal protective equipment (PPE) required. • Use and limitations of safety equipment and PPE.	o Yes o N/A
8. Prohibited Activities until Formal Training: • Work on equipment and machinery requiring lockout/tagout. • Use of heavy equipment and powered industrial trucks. • Entry into confined spaces. • Work at elevated heights requiring fall protection. • Excavation and trenching activities. • Use of cranes, hoists and slings.	o Yes o N/A

The Department Head or designated Department Safety Coordinator has reviewed the above information with me and I fully understand the safety and health obligations required of me as part of my job.

_____ _____
Department Head/Department Safety Coordinator Date

_____ _____
Employee Date

Place completed form in the employee's personnel file and send employee to next formal orientation training.

APPENDIX C

TRAINING SIGN-IN SHEET

CERTIFICATE OF TRAINING

ESSEX COUNTY LOCATION _____

CERTIFYING TRAINER _____ Date: _____
DESIGNATED BY _____

This document certifies that training and verification of understanding was conducted for the following subjects:

1 _____
2 _____
3 _____
4 _____

Employee Name	Department	Cert Date	Signature
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			
11)			
12)			
13)			
14)			
15)			

APPENDIX D

NEEDS ASSESSMENT

RECORDKEEPING

Regulation

ACCESS TO EMPLOYEE EXPOSURE AND MEDICAL RECORDS - OSHA (29 CFR 1910.1020)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Recordkeeping is an integral part of the safety and health program. Accurate records must be maintained to meet regulatory, medical, workers compensation and company recordkeeping requirements.
2. The following records will be maintained, as necessary:
   - Medical surveillance, first aid records, occupational injury/illness diagnosis, biological monitoring, exposure follow-up, and workers compensation records.
   - NYSDOL Form SH-900, NYSDOL Form SH 900.1, and associated documentation (Injury/Illness Recordkeeping).
   - Exposure Monitoring.
   - Respirator Fit Test Pass/Fail Record.
   - Material Safety Data Sheets and Chemical Inventory.
   - Employee Training.
3. All health and safety records will contain at least the following information:

Records	Date	Employee Name	Social Security #	Department or Job
Medical Surveillance, First Aid Records, Occupational Injury/Illness Diagnosis, Biological Monitoring and Exposure Follow-Up	X	X	X	**2.1 X**
Exposure Monitoring	X	X	X	X
Respirator Fit Test Pass/Fail Record	X	X		X
Training	X	X		X

4. Safety records are retained for the following duration:

Records	1.1.1 Retention Time
Medical Surveillance, First Aid Records, Occupational Injury/Illness Diagnosis, Biological Monitoring, and Exposure Follow-Up	Employee's duration of employment plus 30 years.
Records	2.1.1 Retention Time
Exposure Monitoring	Employee's duration of employment plus 30 years.
MSDSs/Chemical Inventory	At least thirty (30) years.
NYSDOL Form SH-900, NYSDOL Form SH 900.1 and associated documentation	At least five (5) years following the year of the records.
Respirator Fit Testing	At least until the next fit test is administered.
Training	At least two (2) years following the training.
Bloodborne Pathogens Training and Powered Industrial Truck Training	At least three (3) years following the training.

5. Employees are informed of their right to access records at their initial time of employment and annually thereafter. This information contains an explanation of the:
   - Employees right to records access.
   - Existence, location and availability of records.
   - Person responsible for maintaining and providing access to records.
6. Upon written request, employee records will be made available to the employees, employee representative (authorized in writing by the employee) and government agencies. Records will be provided in a reasonable timeframe and location.
7. All records will reside in either the individual department or county safety or personnel files. Records will be stored in a safe and secure location to maintain confidentiality and prevent physical damage to these documents.

ACCIDENT REPORTING AND INVESTIGATION

Regulation

1. Recording and Reporting Occupational Injuries and Illness – OSHA (29 CFR 1904)
2. Accident Investigation – Good Management Practice

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for reporting and investigating workplace accidents have been established to help prevent accident reoccurrence and protect the safety and health of employees. Effective accident reporting, investigation and analysis will assist in the implementation of a proactive accident prevention and loss control program.

General Guidelines for all Accidents

1. All employees are responsible to report accidents and injuries, regardless of severity, immediately to the Department Head or Department Safety Coordinator.
2. The Department Head or designated Department Safety Coordinator will take appropriate action for any report of injury or illness. This includes:
   - Ensure any injured employee receives prompt first aid, medical care or emergency services, as necessary. Note: Provisions for transportation (i.e., ambulance, escorted driver, etc.) to the medical providers will be provided, as deemed necessary.
   - Secure the area or abate the hazard to ensure additional employees do not get injured.
   - Follow the established accident reporting and investigation procedures.
   - Notify County Safety Officer immediately if it goes beyond minor first aid. All minor first aid cases can wait until normal business hours.
3. Once the scene is secured and immediate needs of the employee are provided, the Department Head or designated Department Safety Coordinator will be responsible for completing the accident reporting and investigation reports for all accidents, illnesses and injuries involving Essex County personnel. This procedure should be completed as follows (according to the PERMA Quick-Fax Report):
   - The Department Head or designated Department Safety Coordinator should complete Section A of the PERMA Quick-Fax.
   - Once completed the employee needs to sign Section B of the PERMA Quick-Fax.

- If the injury requires medical treatment beyond first aid, the employee will take the PERMA Quick-Fax to the medical provider for completion of Section C and the functional capacities form, as needed. The Medical provider keeps the Medial Provider's copy.
- The employee returns the PERMA Quick-Fax to the Department Head or designated Department Safety Coordinator upon return to work that day, or as soon as feasible thereafter.
- The Department Head or designated Department Safety Coordinator completes the Incident Analysis on the back of Injury Coordinator's Copy.
- By the end of the day, or as soon as feasible thereafter, the Department Head or designated Department Safety Coordinator must provide designated copies of the PERMA Quick-Fax and Incident Analysis to the Injury Coordinator (Clerk of the Board of Supervisors), employee and department.

4. An accident investigation will be conducted by the Safety Officer, Department Head or designated Department Safety Coordinator as soon as feasible following the accident or injury. The purpose of the accident investigation is to identify the root cause of the accident or injury and establish corrective actions to prevent the reoccurrence in the future. The accident investigation will be conducted as follows:
   - Include visual observation of the accident location and gathering of accident facts
   - Include interviews with the injured employee and any witnesses in a fact gathering manner to determine the facts of the accident (not blame gathering).
   - Identify the potential root causes of the accident.
   - Establish immediate and long term corrective actions to prevent the occurrence of the root cause in the future.
   - Assign responsible persons to ensure the corrective action is implemented and followed up.
5. All accident reports will be evaluated on a periodic basis to ensure they are being completed properly and that appropriate corrective actions are being implemented and followed up.

Guidelines for Regulatory Recordkeeping

1. The Clerk of the Board of Supervisors will maintain the NYSDOL Form SH-900, SH-900.1 and SH 900.2 records for all departments. This recordkeeping will include:

   - SH-900 (Log of Work Related Injuries and Illnesses) records updated for the applicable department within seven (7) days of the injury or illness based on information provided in the PERMA form.
   - Distribution of the updated SH-900 Records to each department on a monthly basis.
   - PERMA Quick-Fax (SH 900.2 equivalent Injury and Illness Incident Report) records for all injuries and illnesses.

- SH-900.1 (Summary of Work Related Injuries and Illnesses) for each year.

2. Each department will post the NYSDOL Form SH-900.1 (Summary of Work Related Injuries and Illnesses) from February 1 to April 30 for the previous year. This information will be summarized and provided by the Clerk of the Board of Supervisors.
3. All NYSDOL forms will be maintained for five (5) years following the year of record.

Training

1. All employees are provided with training on the guidelines to immediately report accidents, illnesses, and injuries.
   - Additional training will be provided to the Department Head or designated Department Safety Coordinator to ensure an understanding of the proper accident reporting and investigation procedures.
2. Training will be conducted:
   - Prior to initial job assignment (orientation).
   - As needed, to continually ensure employees understand the accident reporting guidelines.

WORK AT ELEVATED HEIGHTS

Regulation

WORKING AND WALKING SURFACES – OSHA (29 CFR 1910 SUBPART D)

1. **FALL PROTECTION – OSHA (29 CFR 1926 SUBPART M)**
2. **SCAFFOLDS – OSHA (29 CFR 1926 SUBPART L)**
3. **LADDERS – OSHA (29 CFR 1926 SUBPART X)**

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for work at elevated heights have been established to protect the safety and health of employees working at elevated heights where a fall could seriously injure the employee.
2. This guideline applies to all activities with exposure to elevated heights greater than four (4) feet or fall hazards greater than six (6) feet during construction activities, ladder or scaffold use.

Competent Person

1. All activities requiring use of fall protection systems or scaffolding require the presence of a designated "Competent Person". The competent person must:
   - Be capable of identifying existing or predictable hazards in surroundings or working conditions associated with falls or scaffold use.
   - Be authorized to take prompt corrective measures to eliminate hazardous conditions associated with falls and scaffold activities.
   - Ensure that all safety requirements outlined in this guideline, 29 CFR 1910 Subpart D, 29 CFR 1926 Subpart M for fall protection and 29 CFR 1926 Subpart L for scaffolds are utilized when required to protect employees during work activities.
   - Conduct and document periodic inspections of scaffolds (during installation, use and removal) and fall protection (during use).

General Fall Protection Guidelines

2. Every open-sided floor or platform four (4) feet or more above adjacent floor or ground level shall be guarded by a standard railing, including top rail, midrail and toe-board, if required.
3. When standard railing is not provided or during activities where guardrails are removed, alternate fall protection is required. This fall protection can include:
   - Fall Arrest Systems
   - Safety Nets
   - Or other controls to ensure employees are protected in case of a fall or prevented from reaching the fall hazard.
4. When these fall hazards are present, the competent person will be responsible for establishing the appropriate fall protection requirements to perform the job. The competent person will complete a Fall Protection Assessment form for all encountered tasks with fall hazards. The form is provided in Attachment A.
5. Those standard tasks at the County that required fall protection include:

Department	Task	Required Equipment
Public Works	Bucket Lift Operations	• Full Body Harness • Lanyard
Public Works/Horace Nye	Work on Roof	

6. All fall protection equipment will be used in accordance with the manufacturer's requirements. Fall protection equipment will be stored in a clean and dry location when not in use.
7. All fall protection equipment will be visually inspected prior to and following each use.
8. Any equipment observed as damaged or not functioning properly will be tagged "Out of Service" immediately and reported to the Department Head or designated Safety Coordinator. This equipment will remain "Out of Service" until properly repaired or replaced.
9. Following a fall, all affected fall protection equipment will be provided to the Department Head or designated Safety Coordinator for inspection and return to the manufacturer for inspection, as required.

Other Activities at Elevated Heights

1. Skylight floor/roof openings and holes must be guarded by a standard skylight screen or a fixed standard railing on all exposed sides.

2. When scaffolding is used, it should be erected in accordance with safe work practices by the manufacturer and specific requirements defined by OSHA (29 CFR 1926 Subpart L).
3. All scaffolding activities will be coordinated by a competent person.
4. When ladders are used, employees should:
   - Select the appropriate ladder for the job.
   - Follow the manufacturer's safe use procedures and those established by OSHA (29 CFR 1910 Subpart D/29 CFR 1926 Subpart X).
5. Inspect the ladder prior to each use to ensure the ladder is in good working order. any ladders observed as damage or not functioning properly will be tagged "Out of Service" immediately and reported to the Department Head or designated Safety Coordinator. This equipment will remain "Out of Service" until properly repaired or replaced.

Training

3. Any employee who will be designated and authorized as a competent person will be trained prior to being assigned competent person duties in the following topics:
   - Recognition of hazards associated with scaffolding and fall protection activities.
   - Safety guidelines for scaffolding and fall protection activities.
   - Selection and use guidelines for scaffolding and fall protective systems.
   - Inspection guidelines for scaffolds and for fall protection systems.
4. Any employee required to work with scaffolds or fall protection will be trained prior to assignment in the following topics:
   - Awareness of hazards associated with the specific activities.
   - General safety guidelines for scaffolds or fall protection.
   - Awareness of scaffolds or fall protection safety guidelines.
5. Training will be conducted:
   - Prior to being assigned to any activities which involves the use of scaffolds or fall protection?
   - As needed, to ensure personnel safety during activities.

APPENDIX A

Fall Protection Assessment

The fall protection needs assessment should be completed for work activities that expose employees to unprotected fall hazards that are not otherwise protected by standard railings or other protective measures. Fall hazards are considered general industry activities exceeding four (4) feet in height or construction activities exceeding six (6) feet in height.

Department/Location:_____ **Date:**_____

Description of Activities with Fall Hazards:_____

o **Are alternate means available to conduct the work to eliminate the fall hazard?**

Description of the Means to Control the Fall Hazard:_____

Protective Equipment Needed to Conduct the Work:

o **Have all affected employees been trained on the provisions established for fall protection?**

Affected Employees:

Competent Person:_____ **Date:**_____

HEAVY EQUIPMENT AND POWERED INDUSTRIAL TRUCKS

Regulation

1. **POWERED INDUSTRIAL TRUCKS – OSHA (29 CFR 1910.178)**
2. **MOTOR VEHICLES, MECHANIZED EQUIPMENT, AND MARINE OPERATIONS - OSHA (29 CFR 1926 SUBPART O)**

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for heavy equipment and powered industrial trucks have been established to prevent the catastrophic failure of this equipment and protect the safety and health of employees using or in the area of the equipment.
2. These requirements are in addition to requirements necessary to meet commercial driver licensing requirements and other non-OSHA regulatory requirements.
3. Powered industrial trucks include forklifts, skidsteer with fork attachments, and pay loader with fork attachments.
4. Heavy equipment includes pay loaders, gradealls, road graders, skidsteers, excavators, dump trucks, etc.

General Use Guidelines

1. Only trained and authorize employees will be permitted to use or operate heavy equipment and powered industrial trucks. Employees using this equipment will be familiar with safe equipment operation and use, limitations and inspection requirements, as per the OSHA standard (29 CFR 1910.178/29 CFR 1926 Support 0) and the manufacturer's recommendations.
2. Unauthorized personnel, contractor personnel and facility visitors are not permitted to operate or drive heavy equipment or powered industrial trucks.
3. All heavy equipment and powered industrial trucks will be maintained in a clean and good working order. This equipment will only be serviced by trained and authorized personnel.
4. Damaged or defective parts requiring replacement will be replaced only with replacement parts equivalent (with respect to safety) to those used in the original design. Heavy equipment or powered industrial trucks will not be altered from the manufacturer design, nor will they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts except as specified by the manufacturer or conducted by the manufacturer's authorized service representative.

5. All heavy equipment and powered industrial trucks will be inspected prior to use on a daily basis and on each shift. These inspections will be conducted to verify visual condition and proper operational functioning. A copy of the daily inspection is provided as attachment A.
6. Any equipment observed as damage or not functioning properly will be tagged "Out of Service" immediately and reported to the Department Head or designated Safety Coordinator. This equipment will remain "Out of Service" until properly repaired or replaced.

Training

1. Any employee required to use heavy equipment or powered industrial truck will be trained prior to using the equipment. Training will be conducted prior to any heavy equipment or powered industrial truck activities.
2. Heavy equipment training will include on-the-job training conducted by other qualified personnel designated by Essex County to conduct this training.
3. Powered industrial truck training will be conducted by an authorized trainer, which will include classroom training, written test and hands-on driver test. Training will include the components defined in the OSHA standard (29 CFR 1910.178). Documentation of training and competency will be maintained for each authorized employee. Training will be performed on the following frequency:
    - At least every three (3) years.
    - As needed, to ensure safe use of the equipment.

APPENDIX A

Heavy Equipment and Powered Industrial Truck Inspection

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CRANE, HOISTS AND SLINGS

Regulation

1. **OVERHEAD AND GANTRY CRANES – OSHA (29 CFR 1910.179)**
2. **SLINGS – OSHA (29 CFR 1910.184)**

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for cranes, hoists and slings have been established to prevent the catastrophic failure of this equipment and protect the safety and health of employees using or in the area of the equipment.

General Use Guidelines

1. Only trained employees will be permitted to use or operate cranes, hoists and slings. Employees using this equipment will be familiar with safe equipment operation and use, limitations and inspection requirements, as per the OSHA standard (29 CFR 1910.179) and the manufacturer's recommendations.
2. Unauthorized personnel, contractor personnel and facility visitors are not permitted to operate or drive heavy equipment or powered industrial trucks.
3. All cranes and hoists will be visibly labeled with their load limitation on both sides of the support beam and hoisting device.
4. All slings will be rated for their load limitations, which will be printed on the sling. "Home-made" slings and sling devices are not permitted unless properly rated and marked by a qualified person.
5. All cranes, hoists and slings will be inspected on a periodic and frequent basis. Periodic inspections will be conducted on an annual basis to evaluate the complete operation of the equipment. Frequent inspections will be conducted prior to each use by the operator to verify visual condition and proper operational functioning.
6. Any equipment observed as damage or not functioning properly will be tagged "Out of Service" immediately and reported to the Department Head or designated Safety Coordinator. This equipment will remain "Out of Service" until properly repaired or replaced.
7. All slings will be stored in designated locations off the ground when not in use.
8. Any "blind" or sling lifting activities will require the use of two (2) persons.

Training

1. Any employee required using a crane, hoist or sling will be trained prior to using the equipment. Training will be conducted:
   - Prior to any crane, hoist or sling lifting activities.
   - On an annual basis.
   - As needed, to ensure safe use of the equipment.

HOT WORK ACTIVITIES

Regulation

1. WELDING, CUTTING AND BRAZING/OSHA (29 CFR 1910 SUBPART Q)
2. WELDING AND CUTTING – OSHA (29 CFR 1926 SUBPART J)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for safe hot work activities have been established to prevent workplace fires and protect the safety and health of employees.
2. Hot work activities include welding, cutting, burning, grinding, and other spark-generating work activities.

Designated Hot Work Areas

1. Routine hot work activities will be conducted in a designated area in applicable departments. These defined work areas will be provided with the appropriate provisions to protect the onset of fire or fire conditions in the work area. These provisions will include, as a minimum:
   - Structural components appropriate for work area (i.e., metal table, concrete floors, etc.).
   - Free of combustible materials and other fire hazards.
   - Partitioning (i.e., welding screen) from other work area to prevent transmission of flying sparks.
   - Fire extinguisher in the immediate work areas.
   - No other conditions or previous fires that resulted from the work area.
2. Designated hot work areas in the County are listed below.

Department	Designated Hot Work Areas
Public Works	
Horace Nye	Maintenance Area (example only)

Guidelines for Hot Work Activities

1. Only trained and authorized personnel are permitted to conduct hot work activities.
2. Any hot work activities conducted outside of the designated hot work areas require the completion of a hot work permit.
3. The hot work permit is a physical document that is completed to ensure that all provisions to prevent fire or employee injury resulting from activities are reviewed and approved prior to these activities. A copy of the hot work permit is presented as Appendix A.
4. The hot work permit will be completed by the employee conducting the work and authorized by the Department Head or designated Department Safety Coordinator.
5. A fire watch will be required whenever hot work activities are performed outside of designated hot work areas. The fire watch will meet these conditions:
   - Required before, during and for 30 minutes after hot work activities.
   - Fire-extinguishing equipment available and ready for immediate use.
   - Trained in the use of the fire extinguishing equipment.
   - Familiar with the procedure to sound the fire alarm in the event of a fire and know the location of the nearest telephone.
   - Watch for fires in exposed areas, try to extinguish a fire when safe to do so, or otherwise activate the fire alarm system.
   - Maintain a fire watch for at least 30 minutes after the hot work operations are completed.
6. Hot work activities are prohibited in any areas of County facilities where the following conditions exist:
   - All requirements in the hot work permit cannot be met.
   - Area equipped with a sprinkler system that is inoperable or impaired.
   - Areas potentially containing explosive atmospheres due to the presence of flammable gases, vapors, liquids, or dusts.
   - Within 35 feet of an area where unprotected flammable or combustible liquids or gases are stored.
7. When these conditions do not permit hot work activities, alternate safe working procedures will be established by the designated Department Safety Coordinator for the Public Works or Horace Nye, as applicable.
8. These provisions for hot work also apply to any contractors working for the County.

Training

1. Any employee required to conduct hot work activities will be trained before these activities are performed. Training will be conducted:
   - Prior to assignment to hot work activities.
   - As needed, to ensure employee safety.
2. Employee training for hot work activities will include the following:

- Instruction regarding the safe operation of equipment used to conduct hot work activities.
- Requirements of the Hot Work Permit.
- Location of designated hot work areas.
- Conditions and areas that prohibit hot work activities.

Discuss a fire watch responsibilities, the facility's fire alarm procedures, and fire extinguishing methods to be utilized.

Department:_____ **Date:**_____

Location:_____ **Activity:**_____

YES	NO	
___	___	1. Is there any alternate procedure to use instead of hot work?
___	___	2. Is it possible to move the hot work to a designated hot work area?
___	___	3. Is it possible to move all fire hazards at least 35 feet from the hot work operation?
___	___	4. If all fire hazards can't be removed, can guards, barriers or screens be used to confine any heat, sparks, or slag and to protect the immovable fire hazards?
___	___	5. Is there any flammable or combustible liquid storage areas within 35 feet?
___	___	6. Is the area where the work is to be performed free of combustible debris?
___	___	7. Are all floor, wall and window openings or cracks within a 35-foot radius protected to prevent exposure of combustible material to heat, sparks, flying sparks or slag?
___	___	8. Are combustible materials adjacent to the opposite side of partitions, walls or ceilings protected by guards or moved 35 feet away from the surface?
___	___	9. Is everything moved or protected that could be damaged by sparks or water?
___	___	10. Is suitable fire extinguishing equipment on-hand and ready for immediate use?
___	___	11. Is the sprinkler system in the area operational?
___	___	12. Are the surrounding employees in an area where flying sparks and slag may injure them? Have precautions been implemented to prevent injury to the employees?
___	___	13. Has the Department Head or Safety Coordinator been notified?
___	___	14. Is a fire watch in place?
___	___	15. Is hot work to be conducted in a confined space?
___	___	16. Is appropriate personal protective equipment being used?

Comments:_____

After the hot work activity is completed, the work area must be cleaned and the area thoroughly checked for fires and smoldering material for at least 30 minutes!

Employee Completing Permit:_____

Department Head/designated
Department Safety Coordinator:_____

Upon completion of hot work activities, this permit must be provided back to the Department Head or designated Department Safety Coordinator.

ELECTRICAL SAFETY

Regulation

1. ELECTRICAL – OSHA (29 CFR 1910 SUBPART S)
2. ELECTRICAL – OSHA (29 CFR 1926 SUBPART K)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for electrical work activities have been established to prevent the catastrophic failure of equipment and protect the safety and health of employee's exposure to electrical hazards.

Electrical Safety Guidelines for Work on Electrical Equipment

1. Only qualified electrical personnel are permitted to work on electrical installations or services, live or shut down. Qualified electrical personnel are not permitted to conduct any activities on services exceeding 500 volts. Unqualified personnel are not permitted to conduct any activities on electrical services exceeding 24 volts. This provision does not include those activities conducted as part of servicing and maintenance of machinery and equipment covered under the provisions of the Lockout/Tagout Program.
2. Qualified electrical persons at the County include:

Department	Job Classification
Public Works	Electrician (Buildings and Grounds)
Horace Nye	Maintenance Mechanic
Horace Nye	Maintenance Supervisor
Horace Nye	Housekeeper/Laundry Supervisor
Public Works	Supervisor of Buildings and Grounds
Public Works	Buildings and Grounds Supervisors
Public Works	Maintenance Mechanics
Public Works	Maintenance Person
Public Works	Motor Equipment Operator (Maint). Helper Hwy)

3. When work is conducted by qualified electrical personnel, the electrical service will be shut down, locked and tagged out, and tested prior to activities, whenever feasible.
4. When isolation of electrical service is not feasible or work is conducted on live electrical service, qualified electrical personnel will use effective methods to eliminate the potential for electric shock. This includes, but is not limited to:
   - Using insulated tools and other equipment to prevent electric shock.

- Guarding exposed electrical with insulating blankets to prevent contact.
- Maintaining maximum clearances from electrical service.
- Wearing properly rated personal protective equipment, such as insulated and rated gloves and hard hats.
- Providing a standby person during these activities.

5. When electrical work is conducted in locations exposed to non-qualified persons, the work area will be segregated with barriers to prevent personnel from entering into the area. Special precautions will be taken by qualified persons to protect the area from non-qualified personnel whenever the area is not occupied.

General Electrical Safety Guidelines

1. All electrical equipment used at the County will follow applicable OSHA and National Electrical Code (NEC) regulations. A summary of basic electrical safety guidelines are presented in Appendix A.

Training

1. Any employee designated and authorized as a qualified electrical person will be trained in the following topics:
   - Recognition and prevention of hazards associated with work on electrical installations and service.
   - Guidelines for electrical equipment shut down, lockout/tagout and testing.
   - Effective methods to eliminate the potential for electric shock.
   - Use of insulated tools and electrical safety equipment.
   - Appropriate clearance distances.
   - Wearing properly rated personal protective equipment.
   - Use of standby personnel during activities.
   - Safety guidelines for specific voltages and installations.
2. All non-qualified personnel will be provided with basic training on electrical safety and the prohibition of conducting work on electrical installations or services.
3. Training will be conducted:
   - Prior to assignment.
   - On an annual basis.
   - As needed, to ensure personnel safety.

APPENDIX A:

ELECTRICAL SAFETY PRACTICES

1. All electrical conductors and equipment used by the County must be appropriate for the intended use.
2. Electrical equipment must be free from recognized hazards that are likely to cause death or serious physical harm to employees. Safety of equipment must be determined by the following:
   - Suitability for installation and use in conformity with the provisions of the standard. Suitability of equipment for an identified purpose may be evidenced by a listing, by labeling or by certification for that identified purpose.
   - Mechanical strength and durability. For parts designed to enclose and protect other equipment, this includes the adequacy of the protection thus provided.
   - Electrical insulation.
   - Heating effects under conditions of use.
   - Arcing effects.
   - Classification by type, size, voltage, current capacity and specific use.
   - Other factors that contribute to the practical safeguarding of employees who use or are likely to come in contact with the equipment.
3. All live parts of electric equipment operating at 50 volts or more must be guarded against accidental contact. Guarding of live parts must be accomplished as follows:
   - Location in a cabinet, room, vault or similar enclosure accessible only to qualified persons.
   - Use of permanent, substantial partitions or screens to exclude unqualified persons.
   - Location on a suitable balcony, gallery or platform elevated and arranged to exclude unqualified persons.
   - Elevation of eight feet or more above the floor.
   - Entrance to rooms and other guarded locations containing exposed live parts must be marked with conspicuous warning signs forbidding unqualified persons to enter.
   - Electric installations that are over 600 volts and that are open to unqualified persons must be made with metal-enclosed equipment or enclosed in a vault or area controlled by a lock.
   - Electrical equipment must be marked with appropriate caution signs.
4. Each disconnecting means (i.e., circuit breaker, throw switch, etc) for motors and appliances must be legibly marked to indicate its purpose.
5. Each service, feeder, and branch circuit, at its disconnecting means or over current device, must be legibly marked to indicate its purpose.
6. Identification markings must be of sufficient durability to withstand the environment conditions they are in.
7. Sufficient access and working space must be provided and maintained to all electric equipment to permit ready and safe operation and maintenance of such equipment. At a minimum, an access area of at least 36 inches will be maintained in front of all electrical circuit breaker boxes, electrical control panels and other electrical installations. Additional clearance may be necessary for higher voltage installations.
8. When normally enclosed live parts are exposed for inspection or servicing, the working space, if in a passageway or general open space shall be suitably guarded to prevent contact by unqualified personnel.

9. Electrical equipment must be guarded against accidental contact with live parts by unqualified personnel. Live parts of electric equipment operating at 50 volts or more must be guarded against accidental contact by approved cabinets or other forms of approved enclosures, or by any of the following means:
    - By location in a room, vault or similar enclosure that is accessible only to qualified persons.
    - By suitable permanent, substantial partitions or screens so arranged that only qualified persons would have access to the space within reach of the live parts. Any openings in such partitions or screens shall be so sized and located that persons are not likely to come into accidental contact with the live parts or to bring conducting objects into contact with them.
    - By location on a suitable balcony, gallery or platform.
    - By elevation of 8 feet or more above the floor or other working surface. Note that, although equipment elevated at least 8 feet is considered to be guarded, this may not be adequate if material being handled is likely to make contact with live parts.
10. In locations where electric equipment is exposed to physical damage, enclosures or guards must be strong enough or otherwise protected to prevent damage.
11. Entrances to rooms and other guarded locations containing exposed live parts must be marked with conspicuous warning signs forbidding unqualified persons to enter.
12. For all exposed conductors up to 50,000 volts unqualified personnel must maintain a minimum clearance distance of 10 feet for all body parts and equipment.
13. Conductors entering boxes, cabinets or fittings must be protected from damage where they enter. The device used must close the hole through which the conductor passes as well as provide protection from abrasion. If the conductor is in a conduit and the conduit fits tightly in the opening, additional sealing is not required.
14. The knockouts in cabinets, boxes and fittings should be removed only if conductors are to be run through them. If a knockout is missing or if there is another hole in the box, the hole or opening must be closed.
15. All pull boxes, junction boxes, and fittings shall be provided with covers approved for the purpose.
16. Each outlet box shall have a cover, faceplate or fixture canopy. Covers of outlet boxes having holes through which flexible cord pendants pass shall be provided with bushings designed for the purpose or have smooth, well-rounded surfaces on which the cords may bear.
17. Flexible cords and cables must be approved and suitable for conditions of use and location. The standard lists specific situations in which flexible cords may be used. Flexible cords and cables may be used only for:
    - Pendants.
    - Wiring of fixtures.
    - Connection of portable lamps or appliances.
    - Wiring of cranes and hoists (where flexibility is necessary).
    - Connection of stationary equipment to facilitate their frequent interchange (equipment which is not normally moved from place to place, but might be on occasion).

- Prevention of the transmission of noise or vibration. (In some cases vibration might fatigue fixed wiring and result in a situation more hazardous than flexible cord.).
- Appliances where the fastening means and mechanical connections are designed to permit removal for maintenance and repair (e.g. water coolers, exhaust fans).

18. Unless specifically permitted by one of the situations above, flexible cords and cables may not be used:
    - As a substitute for the fixed wiring of the structure.
    - Where run through holes in walls, ceilings, or floors.
    - Where run through doorways, windows, or similar openings.
    - Where attached to building surfaces.
    - Where concealed behind building walls, ceilings or floors.
19. Extension cords may used temporarily to permit use of the appliance or tool in its intended manner at some distance from a fixed outlet but usage must be temporary and not to avoid providing a fixed outlet where needed.
20. Flexible cords, including temporary extension cords, must be protected from damage by activities in the area, by door or window edges, by staples or fastenings, by abrasion from adjacent materials or simply by aging.
21. All extension cords will be three wire conductor cords, with intact ground prong, and will be inspected prior to use to determine if damaged.
22. Damaged extension cord will be removed from service or rendered unusable and replaced.
23. Ground-fault circuit-interrupters will be used for work activities, including but not limited to the following:
    - Use of electrical portable hand tools and extension cords.
    - Use of electrical powered equipment or extension cords in a conductive work environment (i.e., outside, wet areas, near water, near grounded metal equipment, around sinks, etc.).
    - Use of electrical equipment during construction, repair and maintenance work.
    - Any other situation where standard grounding and conductor insulation may not provide adequate safety from electrical hazards for personnel.
24. Ground-fault circuit-interrupters may be one of the following: circuit breaker type, receptacle type, permanently mounted type, portable type or cord connected type.
25. Periodically, outlets should be tested to determine if each outlet has correct polarity, continuity of grounding path, and is correctly wired. This will be accomplished by the use of a plug-in outlet tester or equivalent.
26. Periodically, outlets equipped with GFCIs should be tested to determine if each outlet has correct polarity, has continuity of grounding path, is functioning properly and is correctly wired. This will be accomplished by the use of a plug-in outlet GFCI tester or equivalent.
27. Periodically, extension cords should be tested to determine if each cord has continuity of grounding path and conductor wires. Additionally each will be visually inspected for damage.

EXCAVATION AND TRENCHING

Excavation Trenching Guideline

Written Guideline

1. Essex County is committed to ensuring that employees who work around or enter excavations and trenches are protected from the hazards of entry into excavations and provisions are established for working around or near excavations and trenching activities safely.
2. These goals will be met through:
   - Excavation and trenching safety guidelines.
   - Competent person requirements.
   - Employee training.

Program Responsibilities:

1. Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Department Heads or designated Department Safety Coordinators are responsible to:
   - Oversee policies and procedures of the program.
   - Provide guidance on the requirements of the program.
   - Coordinate the evaluation of excavation and trenching activities.
   - Coordinate excavation and trenching training.
   - Coordinate outside emergency and rescue services.
   - Coordinate contractor excavation and trenching activities.
   - Maintain and review inspection records.
   - Evaluate the effectiveness of the program on an annual basis.
3. Employees are responsible to:
   - Not enter excavation or trenches unless authorized and trained.
   - Follow established excavation and trenching guidelines.
   - Report any program inconsistencies.
4. Contractors are responsible to:
   - Become aware of the Essex County excavation and trenching guidelines.
   - Coordinate excavation and trenching activities with Essex County personnel.
   - Implement appropriate excavation and trenching procedures as per OSHA regulatory requirements.

Excavation and Trenching Guidelines

Applicability

1. This section covers guidelines for the protection of employees working in and around excavations and trenches. Job safety must be planned, coordinated, followed, and monitored when working around excavations and trenches.
2. All supervisors will be responsible for ensuring that all employees follow these guidelines.

Excavation and Trenching Definitions

1. **Excavation -** An excavation is any man-made cut, cavity, trench, or depression in the earth's surface formed by earth removal.
2. **Trench** - A trench is a narrow excavation with its depth usually exceeding its width. Width of a trench (measured at the bottom) is not greater than 15 feet.
3. **Competent Person**- A competent person is one who through training and/or experience is knowledgeable about soil analysis and type, the use of protective systems (sloping/benching and support systems), and the requirements of the standard. Certification/documentation to establish competency will be on file at the project. This person will also be capable of identifying existing and predictable hazards in the surrounding or working conditions, which are hazardous, unsanitary, or dangerous to employees, and will have the authority to take prompt corrective action.
4. **Protective System** - A protective system is a method of protecting employees from cave-in (i.e., sloping, shoring, benching or shield systems).
5. **Registered Professional Engineer** - A person registered as a professional engineer in the state where the work is to be performed. However, a professional engineer registered in any state is deemed to be a Registered Professional Engineer within the meaning of the standard when approving designs for manufactured protective systems or tabulated data to be used in interstate commerce.

General Excavation Guidelines

1. Before opening an excavation, every effort will be made to locate all existing underground installations (i.e., water, fuel, sewer, gas, telephone, and electric lines.)
2. The Competent Person or his/her designated representative will check with the property owner and Dig Safely New York to locate existing underground facilities.
3. The Competent Person or his/her designated representative will mark proposed excavation area with white paint prior to utility companies marking location of underground facilities.
4. Underground installations will be supported and protected as necessary during the excavation process.
5. A pre-excavation checklist (Attachment 1) must be initiated by the competent person doing the excavation and completed before any digging is begun.

6. A designated competent person will perform at least two tests, one visual and one manual, such as thumb penetration, to determine soil classification.
7. Excavations and trenches as well as adjacent areas will be inspected by a designated competent person:
   - Daily,
   - After every rainfall,
   - As soil conditions change, and
   - As needed throughout the shift.
8. A "Daily Excavation Safety Checklist" will be completed in conjunction with this inspection (Attachment 2).
9. If there is evidence of possible slides or cave-ins, indications of failure of protective systems, hazardous atmosphere, or other hazardous conditions necessary safety precautions will be taken before any additional work in that section of the excavation begins.
10. Unless adequate precautions have been taken, employees will not work in excavations where water has or is accumulating.
11. If water accumulation is controlled or prevented by the use of water removal, a competent person will monitor the removal.
12. Buildings and walls whose stability is jeopardized by an excavation or trench will be provided with shoring, bracing, or underpinning.
13. Excavations and trenches which are adjacent to backfilled excavations and trenches and are subject to vibrations from operations of equipment (i.e., derricks, trucks, cranes, and shovels), railroad traffic, and highway traffic will be secured with a support system, shield system, or other protective equipment (i.e., shored, braced, sheet piled, etc.).

Excavation Access/Egress

1. In trenches 4 feet or more in depth, ladders, steps, ramps or other safe means of access and egress will be provided and utilized for access and egress in the excavation.
2. Access and egress means shall be located at intervals requiring 25 feet or less of lateral travel.
3. If a ladder is used, the ladder will extend 3 feet above the original surface of the ground.

Fall Protection

1. Standard guardrails will be provided on all walkways and bridges used by employees or equipment to cross over excavations or trenches.
2. All wells, pits, shafts, trenches, or other similar ground fall hazard will be barricaded or covered.

Protection from Loose Rock or Soil

1. Employees will be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations.
2. Protection will be provided by placing and keeping such materials or equipment at least 2 feet from the edge of the excavation, 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.

Equipment

1. Where equipment or vehicles operate near excavations, the sides of the excavation must be shored or braced sufficiently to withstand additional stress caused by weight or vibration. Stop logs (minimum of 6 inches high) or barricades will be provided.
2. No one will be allowed under loads handled by shovels, derricks, or hoists or near vehicles being loaded by such equipment.
3. Employees exposed to vehicular traffic operating in the area of excavations or trenches will be provided with and instructed to wear warning vests or other personal protective equipment marked with or made of reflective or highly visible material.

Hazardous Atmospheres

1. Atmospheric Testing will be performed for oxygen and hazardous atmospheres in excavations and trenches 4 feet or deeper where the conditions are deemed likely to exist.
2. A competent person will assure that testing is accomplished, engineering controls established, and proper personal protective equipment utilized to protect employees as necessary.
3. Emergency rescue equipment will be available as required.

Protective Systems

1. An excavation protective system is 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.
2. Protective systems include support systems, sloping and trenching systems, shield systems, and other systems that provide the necessary protection, such as portable trench boxes or sliding trench shields.
3. Protective systems will be able to resist all loads that are or could possibly be exerted on the system.
4. Protective systems are not required in:
    - Excavations less than 5 feet in depth where a competent person's examination of the ground indicates no danger of a potential cave-in.
    - Excavations made entirely in stable rock.

Sloping/Benching Protective Systems

1. The slopes and configurations of sloping and benching systems for excavations 5 to 20 feet in depth will be selected and constructed by a designated competent person, and will be in accordance with the following requirements.
2. Soil analysis will be performed by a competent person.
3. This will consist of at least one visual and at least one manual analysis.
4. Such analysis will be done in accordance with acceptable visual and manual tests or other recognized methods of soil classification.

Soil or Rock Type	Maximum Allowable Slope (Horizontal: Vertical)	
Stable Rock	Vertical	90 degrees
Type A	3/4-ft:1-ft	53 degrees
Type B	1-ft:1-ft	45 degrees
Type C	1 ½-ft:1-ft	34 degrees

5. No soil classification is required if 1 ½-ft: 1-ft (horizontal: vertical) or 34-degree slope is used.
6. If a 1-1/2-ft: 1-ft (horizontal: vertical) 34-degree slope is not used, a soil classification must be made.
7. The excavation must comply with one of the three (3) following options:
8. Sloping/Benching Option I - Maximum allowable slopes, and allowable configurations for sloping and benching systems will be determined in accordance with the conditions and requirements in the 1926 OSHA standard appendices A (soil classification) and B (sloping and benching). Refer to the 1926.652 OSHA standards.
9. Sloping/Benching Option II - Designs of sloping or benching systems will be selected by using tabulated data based on soil conditions. These tables are to be calculated and prepared by a Registered Professional Engineer. This information must be documented, and filed on the site with the Registered Professional Engineer's stamp on the tables.
10. Sloping/Benching Option III - The sloping and benching system must be designed by a Registered Professional Engineer. This information must be documented and filed on the site with the Registered Professional Engineer's stamp on the plan.
11. Systems for sloping and benching of excavations in excess of 20 feet deep must be designed and stamped by a Registered Professional Engineer in the state where the work is being performed.

Support Systems, Shield Systems, Other Protective Systems

1. Designs of support systems, shield systems, and other protective systems will be selected and constructed by a designated competent person and will be in accordance with one of four options.
2. Option I Designs Using Appendices A, C, D of 1926 OSHA Standards
   - Timber shoring in trenches will be determined using conditions and requirements of OSHA Appendices A (soil classification), C (timber shoring for trenches) and D (designs for hydraulic shoring). (Refer to the 1926 OSHA standards.)
3. Option II Designs Using Manufacturer's Tabulated Data
   - Designs of support systems, shield systems or other protective systems that are drawn from manufacturer's tabulated data will be in accordance with all specifications, recommendations, and limitations issued or made by the manufacturer (i.e., trench jacks, hydraulic shoring). The supporting information must be filed on the site.
4. Option III Designs Using Other Tabulated Data
   - Designs of support systems, shield systems, or other protective systems will be selected from and be in accordance with tabulated data. The supporting data must be filed on the site. Identification of the Registered* Professional Engineer approving the data must be on file.
5. Option IV Designs by Registered Professional Engineer
   - Support systems, shield systems, and other protective systems not utilizing Options I, II, or III, will be approved and stamped by a Registered Professional Engineer in the state where the work is being performed.

Barricading Excavations and Trenches

1. All excavations of any type will be barricaded to protect pedestrians and equipment/vehicles.
2. All barricades will be set up prior to excavating, and expanded as required to ensure worker safety.
3. Excavations requiring wooden barricades:
   - Any excavation scheduled to be open more than 36 hours.
   - Any excavation that cuts an accepted established sidewalk or aisle way.
4. Wooden barricades will be constructed with a 2-in. by 4-in. top rail at 42 inches in height and a 1-in. by 4-in. mid-rail at 21 inches in height. Uprights constructed of 2-in. by 4-in. will be no farther than 8 feet apart.
5. Excavations requiring sawhorse-type barricades with flashing lights are:
   - Any excavation cutting an accepted, established roadway or temporary roadway where vehicles may travel.
6. All other excavations may be barricaded with yellow and black fiber barrier tape. Signs will be hung periodically, stating the hazard.

Contractor Excavation and Trenching Activities

1. All contractors conducting excavation or trenching activities or entering excavations and trenches are required to follow 29 CFR 1910 Subpart P with respect to excavation and trenching activities.
2. When contractor employees will be conducting excavation and trenching activities the contractor will be:
   - Informed that excavation and trenching activities must be completed under the direction of a competent person and that excavation and trench entry is only permitted through compliance with proper protective procedures.
   - Debriefed at the conclusion of the excavation and trenching activities regarding any hazards confronted or created during excavation.
3. When the contractor is working with or in the same space as Essex County employees, both parties will coordinate their activities to ensure that activities do not endanger the health of other personnel.

Excavation Inspection Checklists

1. Before the end of the shift of completion, the competent person shall forward copies of all pre-excavation and daily excavation checklists to the Essex County Safety Coordinator.
2. Original checklists will be maintained on the project site until completion of the project.
3. Upon completion of the project, the originals will be forwarded to the Essex County Safety Coordinator.

Information and Training

1. All employees participating in excavation and trenching activities are provided with information and training applicable to their job. Training is conducted:
   - Prior to participation in excavation and trenching activities.
   - With changes in hazards or excavation and trenching safety procedures.
   - As needed, to ensure employees are following established excavation and trenching safety guidelines.
2. Training is provided to the following levels, based on the role to be performed:
   - General excavation and trenching safety and hazard awareness.
   - Competent Person.
3. Training will ensure an understanding, knowledge and skill to perform the duties designated for the level of excavation and trenching activity to be performed.

Program Evaluation

1. Essex County Safety Coordinator or designated alternate will review the program, and the past year's excavation and trenching checklist on an annual basis to ensure the continued effectiveness of the guidelines and programs.
2. The program will be updated, as needed, to reflect any changes in the program.

ATTACHMENT 1

PRE-EXCAVATION CHECKLIST

Pre-Excavation Checklist

Work Performed By:_____ Date:_____

Location of Excavation:_____

Reason for Excavation:_____

Start Date:_____ Anticipated Completion Date:_____

Competent Person Responsible for the Excavation:_____

Dig Safe New York Contacted: Date/Time: _____

Utilities	Present In Excavation Area	Comments
Water		
Sewer		
Gas		
Power		
Fire Lines		
Process Lines		
Others:		

Special Precautions/Requirements (Check Those That Apply)

- ☐ Monitor $\%0_2$
- ☐ Explosion Testing
- ☐ Gas/Fume Testing
- ☐ Standby Person/Rescue Means
- ☐ Other (Specify)_____
- ☐ Hand Excavate At Utility Crossing
- ☐ Means of Access/Egress
- ☐ Barricades
- ☐ Special Clothing

Comments:_____

Project Engineer Signature/Date_____

Safety Coordinator
Signature/Date_____

Excavation Competent Person
Signature/Date_____

Note: Competent Person Must Fill Out Daily Excavation Safety Checklist**.**

ATTACHMENT 2

DAILY EXCAVATION SAFETY CHECKLIST

DAILY EXCAVATION SAFETY CHECKLIST

EXCAVATION LOCATION:_____

DEPTH:_____ WIDTH:_____ LENGTH:_____

Soil Classification: ☐ Stable Rock ☐ Type A ☐ Type B ☐ Type C

	Yes	No	N/A
Have All Procedural Guidelines/Requirements Been Met With Documentation?			
Is Excavation Close To Utilities, Buildings, Footings, Pilings, Source Of Vibration?			
Have Utilities, Etc., Been Located?			
Has A Check For The Previous Excavations In The Area Been Made?			
Have Adequate Supplies of Equipment, PPE, Shoring Material, Signs, Barricades, Machinery, Etc., Been Checked?			
Other Obstructions/Hazards:_____			
Other Obstructions/Hazards:_____			
Slope Will Be:_____ Comments:_____			
Size Of Excavation Depth_____Width _____Length _____			
Do Vehicular And Machinery Operation Patterns Need To Be Changed?			
Will Water Removal Operations/Equipment Be Needed?			
Have Trench Boxes Or Trench Shields Been Checked?			

Entrance/Exit Means ☐ Stairway ☐ Ladders ☐ Ramps
(Maximum Travel Distance To Exit 25-Ft)

If The Depth Of The Excavation Is 5 Feet Or More, Or The Potential For Cave-In Exists Check The Appropriate OSHA 1926 Appendix for the Protective System Below:

☐ B-Sloping/Benching
☐ C-Timber Shoring
☐ D-Aluminum Hydraulic Shoring
☐ E-Alternatives to Timber Shoring
☐ F-Selection of Protective System

Note: Sloping/Benching For Excavations Deeper Than 20 Feet Must Be Designed By A Registered Professional Engineer.

DAILY EXCAVATION SAFETY CHECKLIST
Page 2

ITEMS	CONDITIONS	COMMENTS
SLOPE RATIO TO _____		
SHORING		
SHIELDING		
BARRICADES		
WATER REMOVAL		
TRAFFIC CONTROL		
SPOIL PILE		
WEATHER CONDITION		

ATMOSPHERIC CHECK RESULTS (IF APPLICABLE)

OXYGEN	EXPLOSIMETER	TOXICS	TIME	INITIALS
%	%	PPM		
%	%	PPM		
%	%	PPM		
%	%	PPM		
%	%	PPM		
%	%	PPM		
%	%	PPM		

COMPETENT PERSON:_____
PRINT SIGN

DATE:_____

TIME OF INITIAL/SUBSEQUENT INSPECTION:_____

ASBESTOS

Regulation

ASBESTOS - OSHA (29 CFR 1910.1001)
ASBESTOS – NYS DIVISION OF SAFETY & HEALTH (INDUSTRIAL CODE RULES PART 56)

Review Dates

LAST REVIEW DATE – 10/01/04

Guideline

1. Specific guidelines for activities involving asbestos containing materials (ACM) and potential asbestos containing materials (PACM) have been established to prevent exposure to asbestos fibers and protect the safety and health of employees in or around work areas containing ACM and PACM.

Definitions

1. Asbestos containing materials (ACM) means any material containing more than 1% asbestos.
2. Potential asbestos containing materials (PACM) means thermal system insulation (TSI) and surfacing material in buildings constructed no later than 1980.
3. Abatement means procedures to control fiber release from ACM. This includes removal, encapsulation, enclosure and repair, disturbance of friable asbestos or any handling of asbestos material that may result in the release of asbestos fiber.

Competent Person Guidelines

1. All activities requiring disturbance of ACM or PACM require the presence of a designated "Competent Person". The competent person must:
    - Be capable of identifying existing or predictable ACM or PACM hazards that can result in exposure or release of asbestos.
    - Be authorized to take prompt corrective measures to eliminate hazardous conditions associated with the ACM or PACM.
    - Understand the established criteria defined by OSHA (29 CFR 1910.1001) for asbestos-related activities.

General Safety Guidelines for all installed ACM and PACM

2. All county buildings will be evaluated to determine the presence of ACM and PACM.
3. All ACM will be visually inspected on a periodic basis to verify the condition of the material and make any recommendations in proper management of the material.
4. All identified ACM and/or PACM identified in buildings must have labels or signs affixed or posted so that employees will be adequately notified of what materials contain ACM and/or PACM.
5. Warning signs and labels must be in areas where they will clearly be noticed by employees who are likely to be exposed to ACM/PACM; such areas include the entrance to mechanical room/areas or other regulated areas.
6. Prior to demolition or salvage of structures, removal or encapsulation of materials, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, the presence/absence of PACM and ACM must be determined in according to OSHA (29 CFR 1910.1001) and NYS (Code Rule 56) guidelines.
7. If an employee encounters activities that may impact ACM or PACM, they should report it immediately to the Department Head, designated Department Safety Coordinator or Competent Person.
8. When ACM is present and will be disturbed as part of any of the above activities, the ACM will need to be removed otherwise controlled by an authorized and licensed asbestos contractor. Essex County employees will not be permitted to disturb ACM, in any way.
9. If an employee comes across damaged ACM or PACM:
    - Notify the Department Head, designated Department Safety Coordinator or Competent Person immediately.
    - Do not disturb the material.
    - Block off the area to prevent others from entering.
    - Await the Department Head, designated Department Safety Coordinator or Competent Person for further action.
10. Essex County will contract out services to clean up or respond to any damaged ACM or PACM encountered.

Guidelines for Brake and Clutch Inspection and Repair Activities

1. If the facility conducts brake and clutch inspection, disassembly, repair and assembly operations, the following guidelines will be implemented:
    - Engineering controls and work practices to reduce employee exposure to materials containing asbestos.
    - Methods using a negative pressure enclosure/HEPA vacuum system method or low pressure/wet cleaning method, which meets the detailed requirements set out in 29 CFR 1910.1001 Appendix F (Attachment A) or an equivalent method must be used.

- For facilities in which no more than 5 pair of brakes or 5 clutches are inspected, disassembled, repaired, or assembled per week, the method set forth in paragraph D of 29 CFR 1910.1001 Appendix F may be used.

Training

1. Any employee who will be designated and authorized as a competent person will be trained prior to being assigned competent person duties in the following topics:
   - Recognition of ACM, PACM and hazards associated with asbestos.
   - Specific procedures for handling encountered asbestos.
2. Any employee required to work in areas with ACM or PACM present will be provided with basic awareness training:
   - Presence and recognition of ACM and PACM in the area.
   - General hazards of asbestos.
   - Reporting procedures for damaged ACM or PACM.
   - Prohibited practices to disturb asbestos.
3. Training will be conducted:
   - Initially for all affected employees.
   - As needed, to ensure personnel safety.

APPENDIX A

Brake and Clutch Work

Brake and Clutch Work

29 CFR 1910.1001 Appendix F - Work practices and engineering controls for automotive brake and clutch inspection, disassembly, repair and assembly -- Mandatory

This mandatory appendix specifies engineering controls and work practices that must be implemented by the employer during automotive brake and clutch inspection, disassembly, repair, and assembly operations.

Proper use of these engineering controls and work practices by trained employees will reduce employees' asbestos exposure below the permissible exposure level during clutch and brake inspection, disassembly, repair, and assembly operations. The employer shall institute engineering controls and work practices using either the method set forth in paragraph A or paragraph B of this appendix, or any other method which the employer can demonstrate to be equivalent in terms of reducing employee exposure to asbestos as defined and which meets the requirements described in paragraph C of this appendix, for those facilities in which no more than 5 pairs of brakes or 5 clutches are inspected, disassembled, reassembled and/or repaired per week, the method set forth in paragraph [D] of this appendix may be used:

A Negative Pressure Enclosure/HEPA Vacuum System Method

1. The brake and clutch inspection, disassembly, repair, and assembly operations shall be enclosed to cover and contain the clutch or brake assembly and to prevent the release of asbestos fibers into the worker's breathing zone.
2. The enclosure shall be sealed tightly and thoroughly inspected for leaks before work begins on brake and clutch inspection, disassembly, repair, and assembly.
3. The enclosure shall be such that the worker can clearly see the operation and shall provide impermeable sleeves through which the worker can handle the brake and clutch inspection, disassembly, repair and assembly. The integrity of the sleeves and ports shall be examined before work begins.
4. A HEPA-filtered vacuum shall be employed to maintain the enclosure under negative pressure throughout the operation. Compressed air may be used to remove asbestos fibers or particles from the enclosure.
5. The HEPA vacuum shall be used first to loosen the asbestos-containing residue from the brake and clutch parts and then to evacuate the loosened asbestos containing material from the enclosure and capture the material in the vacuum filter.
6. The vacuum's filter, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled according to paragraph (j)(4) of this section and disposed of according to paragraph (k) of this section.
7. Any spills or releases of asbestos containing waste material from inside of the enclosure or vacuum hose or vacuum filter shall be immediately cleaned up and disposed of according to paragraph (k) of this section.

B. Low Pressure/Wet Cleaning Method

1. A catch basin shall be placed under the brake assembly, positioned to avoid splashes and spills.
2. The reservoir shall contain water containing an organic solvent or wetting agent. The flow of liquid shall be controlled such that the brake assembly is gently flooded to prevent the asbestos-containing brake dust from becoming airborne.
3. The aqueous solution shall be allowed to flow between the brake drum and brake support before the drum is removed.
4. After removing the brake drum, the wheel hub and back of the brake assembly shall be thoroughly wetted to suppress dust.
5. The brake support plate, brake shoes and brake components used to attach the brake shoes shall be thoroughly washed before removing the old shoes.
6. In systems using filters, the filters, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled according to paragraph (j)(4) of this section and disposed of according to paragraph (k) of this section.
7. Any spills of asbestos-containing aqueous solution or any asbestos-containing waste material shall be cleaned up immediately and disposed of according to paragraph (k) of this section.
8. The use of dry brushing during low pressure/wet cleaning operations is prohibited.

C Equivalent Methods

1. An equivalent method is one which has sufficient written detail so that it can be reproduced and has been demonstrated that the exposures resulting from the equivalent method are equal to or less than the exposures which would result from the use of the method described in paragraph A of this appendix. For purposes of making this comparison, the employer shall assume that exposures resulting from the use of the method described in paragraph [A] of this appendix shall not exceed 0.016 f/cc, as measured by the OSHA reference method and as averaged over at least 18 personal samples.

D. Wet Method

1. A spray bottle, hose nozzle, or other implement capable of delivering a fine mist of water or amended water or other delivery system capable of delivering water at low pressure, shall be used to first thoroughly wet the brake and clutch parts. Brake and clutch components shall then be wiped clean with a cloth.
2. The cloth shall be placed in an impermeable container, labeled according to paragraph (j)(4) of the standard and then disposed of according to paragraph (k) of this section, or the cloth shall be laundered in a way to prevent the release of asbestos fibers in excess of 0.1 fiber per cubic centimeter of air.
3. Any spills of solvent or any asbestos containing waste material shall be cleaned up immediately according to paragraph (k) of this section.
4. The use of dry brushing during the wet method operations is prohibited.

LEAD-BASE PAINTS

Regulation

LEAD - OSHA (29 CFR 1910.1025 AND 29 CFR 1926.62)

Review Dates

LAST REVIEW DATE – 09/01/04

Guideline

1. Specific guidelines for activities involving lead containing materials and lead-based paints have been established to prevent exposure to lead and protect the safety and health of employees in or around work areas containing lead or lead-based paints.

Definitions

1. Lead means metallic lead, all inorganic lead compounds, and organic lead soaps.
2. Covered lead work activities are defined as construction, alteration or repair, painting and/or decorating. These activities may include, but are not limited to the following:
   - Demolition or salvage of structures where lead or materials containing lead are present.
   - Construction, alteration, repair, or renovation of structures, substrates, or portions thereof that contain lead, or materials containing lead.
   - Maintenance operations associated with the construction activities described in this paragraph.
3. Paint and other coatings are considered lead-containing if it contains detectable concentrations of lead. Covered activities on lead-containing coatings require monitoring to determine action level and PEL compliance.
4. Action level means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter (30 ug/m^3) calculated as an 8-hour time-weighted average (TWA).
5. Permissible exposure limit means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 50 micrograms per cubic meter (50 ug/m^3) calculated as an 8-hour time-weighted average (TWA).

Competent Person Guidelines

1. All lead work activities, as defined above, require the presence of a designated "Competent Person". The competent person must:
   - Be capable of identifying existing or predictable lead hazards that can result in exposure or release of lead, particularly with respect to lead-based paints.
   - Be authorized to take prompt corrective measures to eliminate hazardous conditions associated with lead activities.
   - Understand the established criteria defined by OSHA (29 CFR 1926.62) for lead-related activities.
   - Ensure that all safety guidelines outlined by OSHA (29 CFR 1926.62) are utilized when required to protect employees during lead work activities.

General Safety Guidelines for Covered Lead Work Activities

1. Prior to any work on suspected lead-painted surfaces, the County will collect representative samples of the paint to determine the presence of lead.
2. As lead-based paints are identified, they will be updated on an inventory of lead-based paints. The inventory is presented as Attachment A.
3. If an employee encounters activities that may impact lead-based paints, they should report it immediately to the Department Head, designated Department Safety Coordinator or Competent Person.
4. When covered lead work activities are conducted on materials containing lead or detected lead in coatings, the Competent Person will determine that appropriate approach for the activities. This may include:
   - Contracting the services out to a trained outside contractor to address any lead related activities.
   - Establishing in-house procedures to safely work with the material and comply with applicable OSHA regulations (29 CFR 1910.1025 and 29 CFR 1926.62) for lead related work.
5. If work will be conducted in-house, specific written procedures will be developed to include at least the following:
   - Description of each activity in which lead is emitted including: equipment used, material involved, controls in place, crew size, employee job responsibilities, operating procedures and maintenance practices.
   - Description of the specific means that will be employed to achieve compliance.
   - Regulated work areas to be established and personnel authorization to enter.
   - Engineering controls for controlling exposure to lead.
   - Air monitoring data and exposure monitoring program, which documents the source of lead emissions and employee exposure.
   - Required PPE to conduct the activities.
   - Work practices, which includes items required by OSHA (29 CFR 1926.62) and incorporates other safe work practices.

- Description of guideline/requirements for frequent and regular inspections of job sites, materials and equipment to be made by a competent person.
- Medical surveillance requirements.
- Requirements for employee training and access and availability to the written procedures.

Training

1. Any employee who will be designated and authorized as a competent person will be trained prior to being assigned competent person duties in the following topics:
   - Recognition of hazards associated with lead activities.
   - Safety guidelines for lead activities.
   - All provisions of the written lead compliance program for lead work activities.
2. Any employee required to work in or near a regulated lead area will be trained prior to assignment to activities in the following topics:
   - Awareness of hazards associated with lead activities or disturbance of lead containing materials.
   - General safety guidelines for lead activities.
   - Provisions of the written lead compliance program applicable to their job duties during lead work activities.
3. Training will be conducted:
   - Prior to assignment to covered lead work activities.
   - On an annual basis.

   As needed, to ensure personnel safety.

Emergency Preparedness and Fire Protection

Written Guideline

1. Essex County is committed to ensuring that effective procedures and equipment are in place to protect the safety and health of employees and minimize property damage in the event of a workplace emergency.
2. Potential emergencies in County facilities include, but are not limited to:
   - Fire/Explosion.
   - Natural Gas/Propane Leak.
   - Chemical Spill.
   - Utility Interruption.
   - Natural Disaster.
   - Medical Emergency.
   - Bomb Threat/Terrorist Threat.
   - Workplace Violence.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Department Heads or designated Department Safety Coordinators (Department Emergency Coordinators) are responsible to:
   - Implement the policies and procedures of the program.
   - Provide initial and update department-specific emergency information for the department, as required to administer the program.
   - Verify that current emergency contact information and evacuation routes are conspicuously posted and personnel are trained in accordance with the program.
   - Act as Department Emergency Coordinator and designate alternate responsible personnel to act as Department Emergency Coordinator in the event of an emergency.
   - Check and secure department in the event of emergency/evacuation and account for department personnel during department evacuation.
   - Ensure that department-specific procedures are developed and provided for inclusion in the program to address any foreseeable emergencies of a department-specific nature. (e.g., inmate riot at jail, unruly client in DSS or Mental Health, etc.)
3. The Director of Emergency Services is responsible to:
   - Oversee polices and procedures of the program.
   - Provide guidance on the requirements of the program.
   - Act as the County's Emergency Coordinator.
   - Coordinate emergency evacuation drills.
   - Coordinate clean up of controlled chemical spills.
   - Evaluate the effectiveness of the program on an annual basis.

4. The Department of Public Works is responsible to:
   - Maintain all emergency and fire protection systems.
5. Employees are responsible to:
   - Follow established emergency preparedness and fire protection program.
   - Understand potential emergencies in your area and appropriate responses.
   - Participate in emergency preparedness and fire protection program training.
   - Report any program inconsistencies.
6. Contractors or visitors are responsible to:
   - Understand potential emergencies in the area they are working and appropriate responses.

Applicability

1. This emergency preparedness and fire protection program applies to all departments.

Emergency Means of Reporting and Notification

1. All department emergencies must be reported immediately to the Department Emergency Coordinator or designated alternate. The Department Emergency Coordinator or designated alternate will determine the need to contact the Director of Emergency Services.
2. Emergencies involving multiple departments will immediately be reported to the Director of Emergency Services.
3. Emergencies requiring outside assistance (i.e., fire response, EMS, police, etc.) will be immediately reported via the county–wide 911 emergency system and then to the Department Emergency Coordinator.
4. Each department will establish a list of emergency notifications and means by which notifications will be made to department personnel and outside services. Appendix A contains the Department Safety and Emergency Information forms.

General Emergency Response

1. The Department Emergency Coordinator or designated alternate will be responsible for coordination of emergency response in the event of an emergency and accounting for department personnel.
2. Outside emergency services will be contacted, as needed, according the nature of the emergency. The Departmental Safety and Emergency Information forms will provide information on in-house and outside emergency services. This list will be posted on employee information boards or other conspicuous areas within the department.

General Emergency Evacuation

1. An emergency evacuation must be a safe and orderly means of getting employees out of the department and accounted for in the event of an emergency. An evacuation will be effective when procedures are in place, employees are trained and drills have been conducted.
2. Emergency escape routes are established from all locations within the department. Escape routes must meet the following criteria:
   - Established evacuation routes are maintained clear to all exits.
   - There is a primary and secondary evacuation route from all locations of the facility.
   - Designated exits from the facility are maintained clear at all times. These exits are marked with appropriate signs to facilitate their quick identification.
   - Proper illumination (such as natural lighting with supplemental emergency lighting) is provided along the evacuation routes, as well as to the exits and designated assembly areas.
3. Designated assembly areas are established for all personnel in each department. Upon exiting the department, employees are instructed to immediately proceed to their designated assembly area.
4. The Department Emergency Coordinator or designated alternate is responsible for accounting for employees (also contractors and visitors) following an evacuation from the department. It is essential that employees proceed to their designated assembly area and immediately report to the Department Emergency Coordinator or designated alternate.
5. Department Emergency Evacuation and Assembly Area Maps were developed to identify the location of all escape routes, emergency exits and assembly areas for the department. The maps are posted on employee information boards and other conspicuous areas within the department.
6. Elevators must not be used during an emergency evacuation.
7. In the event of an emergency evacuation, the following procedures will be followed:
   - Only if safe to do so, secure your work area (visual check area for personnel, close windows, close non-exit doors, and turn off lights and electrical equipment as you immediately exit your work area)
   - Proceed to the primary emergency exit (or the secondary, if the primary is blocked).
   - Proceed immediately at your designated assembly area.
   - Report to the Department Emergency Coordinator or designated alternate.
   - When all department personnel are present at the assembly area or otherwise accounted for, the Department Emergency Coordinator or designated alternate will notify the Director of Emergency Services (or emergency rescue services) that all department personnel are accounted for.
   - If the Department Emergency Coordinator or designated alternate is unable to account for all department personnel, they will immediately notify the Director of Emergency Services or the nearest emergency response services of the number of department personnel unaccounted for.

- No personnel are allowed to leave the assigned assembly area or re-enter the building until authorized to do so by the Department Emergency Coordinator, designated alternate, Director of Emergency Services or Emergency Services personnel.

8. Emergency evacuation drills will be conducted at least annually for each department. The following procedures will be followed for evacuation drills:
   - Drills will be treated as true evacuations with actual methods of notification, evacuation from the building and assembly in designated areas.
   - All drills will be documented and critiqued to identify any deficiencies in the evacuation. Evacuation critiques will be used to improve future evacuation procedures and training.

General Fire/Explosion Guidelines

1. Any department personnel observing a fire or explosion in the department will take immediate steps to activate employee and emergency notification means, and immediately report the situation to the Department Emergency Coordinator, designated alternate, and outside emergency services, as necessary.
2. The Department Emergency Coordinator or designated alternate will immediately implement the emergency evacuation provisions, and if safe to do so, implement provisions in Section 2.13 (Fire Prevention) with regard to fire extinguisher use.
3. Outside emergency services will be utilized to control fire or explosion events.

Medical Emergencies

1. All employee injuries or illnesses should be reported to the Department Emergency Coordinator or designated alternate immediately.
2. In the event of a serious medical emergency (i.e. any injury or illness that requires more than simple first aid), emergency services should be called immediately, as necessary, to provide necessary services or transport to the hospital.
3. When reporting the emergency provide the following information:
   - Type of emergency.
   - Location of the victim.
   - Condition of the victim.
   - Any dangerous conditions to avoid.
4. Comfort the victim and try not to move the victim until emergency services arrives.
5. Have someone standby outside the building to direct emergency services to the victim's location when they reach the vicinity of the building.
6. Once the victim has been cared for and is transported, normal worker injury reporting procedures should be followed.

Natural Gas/Propane/Flammable Gas Release Guidelines

1. Natural gas, propane and other flammable gases are used in various departments.
2. If a gas leak is detected, immediately leave the area and notify the Department Emergency Coordinator or designated alternate. **WARNING**: Do not try to stop the leak in the area.
3. The following steps should be taken by the Department Emergency Coordinator or designated alternate:
   - Notify the fire department and Director of Emergency Services, and follow their instructions for further actions.
   - Evacuate all personnel from the department or immediate leak area.
   - Prevent personnel from introducing ignition sources (i.e., open flames, cigarettes, operation of electrical switches, telephones, electric motors, etc.) in or adjacent to the leak area.
   - If it can be done remotely from the leak area and is safe to do so, turn off the gas supply at the main shutoff or cylinder valve.
   - Stay a safe distance away and await emergency services.

Other Chemical Releases

1. Other chemicals, such as fuel oil, gasoline, flammable solvents, and corrosive materials are used in various departments.
2. If gasoline, diesel or fuel oil leaks are detected, the following steps will be taken by the Department Emergency Coordinator or designated alternate:
   - Notify the fire department and follow their instructions for further actions.
   - Evacuate all employees from the department or immediate leak area.
   - Prevent personnel from introducing ignition sources (i.e., open flames, cigarettes, operation of electrical switches, telephones, electric motors, etc.) in or adjacent to the leak area.
   - If it can be done remotely from the leak area and is safe to do so, turn off the supply at the main shutoff or tank valve.
   - Open up doors and windows to allow for ventilation.
   - Stay a safe distance away and await emergency services.
3. If liquid chemical leaks or spills of equal to or less than one (1) gallon are detected, such as paints, acids, caustics or cleaners, the following steps will be taken by the Department Emergency Coordinator or designated alternate:
   - Put on appropriate personal protective equipment.
   - Put down materials (i.e. Speedy Dry) to contain the spill.
   - Use materials to clean up and containerize the waste.
   - Notify the Director of Emergency Services for guidance on disposal.
4. If liquid chemical leaks or spills of greater than one (1) gallon are detected, such as flammable solvents, paints, acids, caustics or cleaners, the following steps will be taken by the Department Emergency Coordinator or designated alternate:
   - Evacuate all employees from the immediate area or facility, as necessary.

- If it can be done remotely from the leak area and is safe to do so, turn off all electrical equipment or open flames in the area.
- Notify the Director of Emergency Services and await direction for further action.

Utility Interruption

1. In the event of a utility interruption, notify the Department Emergency Coordinator or designated alternate immediately.
2. Department personnel may become aware of utility interruptions by the obvious absence of that particular utility:
   - No lights, computers not working – Electrical
   - Toilets and drinking fountains not working or backup – Water/Sewerage
   - Inability to place outgoing telephone calls – Telephone
   - Building/area won't warm up during winter – Heating
   - Building/area won't cool in summer – Electric, chilled water, HVAC unit failure
3. The Department Emergency Coordinator or designated alternate should contact buildings and grounds or the appropriate utility, to the extent possible as personal safety, time and capabilities permit, to report the problem and obtain any available information.
4. While a utility interruption does not usually cause emergencies within a facility or injuries to employees, hazards may be created by outages. The Department Emergency Coordinator or designated alternate should notify the Director of Emergency Services.
5. The Department Emergency Coordinator or designated alternate will determine if all department personnel are accounted for and areas will be secured to determine if any additional emergency conditions exist (e.g., personnel trapped in elevators/lifts, etc.).
6. The Department Emergency Coordinator or designated alternate and the Director of Emergency Services will determine the appropriate course of action, to the extent possible as personal safety, time and capabilities permit. The Department Emergency Coordinator or designated alternate and the Director of Emergency Services should consider the following issues:
   - Dangers from tripping and injuries due to lights being out.
   - Emergency generator available for power outages.
   - Person(s) being trapped on elevators.
   - Dangers of extreme heat and cold on personnel.
   - Inability to use telephones for emergencies due to telephone or power outage.
   - Sanitation problems due to loss of water/sewerage system.
7. The Director of Emergency Services should notify the County Manager and Chairman of the Board of Supervisors regarding the continuance of work in the building during a utility interruption and appropriately notify department personnel.
8. If any critical department operations are required to continue during utility outages (e.g. critical patient care, inmate housing, etc.), department-specific guidelines will be developed by the department head and appended to the program. Department-specific guidelines will include information on backup systems and contingencies for backup system failure.

Natural Disaster

1. For the purposes of the program, natural disasters will include the following:
   - Severe Weather
   - Flooding
   - Earthquake
2. In the event of severe weather, the Department Emergency Coordinator or designated alternate should be notified immediately.
3. Warnings of severe weather may be given by Weather Radio, the National Weather Service, or state and local authorities. Department personnel hearing warnings should notify the Department Emergency Coordinator or designated alternate immediately.
4. The Department Emergency Coordinator or designated alternate will notify department personnel by appropriate means. This notification will advise building occupants of the type of warning (thunderstorm, snow, high wind, tornado, etc.) and they will receive further instructions, as appropriate.
5. Depending on the type of severe weather event, and if the event presents an immediate hazard within a department or potential for injuries to employees, the Department Emergency Coordinator or designated alternate will notify the Director of Emergency Services.
6. The Department Emergency Coordinator or designated alternate and the Director of Emergency Services will determine the appropriate course of action, to the extent possible as personal safety, time and capabilities permit.
7. The Department Emergency Coordinator or designated alternate and the Director of Emergency Services should consider the following issues:
   - Immediate dangers of building damage and potential injuries associated with high winds, tornadoes and flooding.
   - The need and feasibility of evacuation or sheltering in place of personnel.
   - Potential loss of utilities.
   - Potential for injuries due to travel-related hazards/road conditions.
   - Inability to use telephones for emergencies due to telephone or power outage.
   - Sanitation problems due to loss of potable water/sewerage system.
8. If any critical department operations are required to continue during severe weather events (e.g. critical patient care, inmate housing, etc.), department-specific guidelines will be developed by the department head and appended to the program. Department-specific guidelines will include information on staffing, sheltering in place, and contingencies for backup system failure.
9. Department personnel, who have been notified of a thunderstorm warning, should take necessary steps to be prepared if conditions deteriorate or if utilities are lost.
10. Guidelines for a tornado warning:
    - The Department Emergency Coordinator or designated alternate will notify department personnel of a tornado warning.
    - The Department Emergency Coordinator or designated alternate will direct department personnel to move to and take cover in the area located in the inner

hallways on the lowest level of the structure and to avoid any area or room with windows.

- If injuries or utility interruption occur, follow guidelines for appropriate emergency.
- Once the all clear is given by the National Weather Service, the Department Emergency Coordinator or designated alternate will provide guidance on further actions.

11. In the event of a sustained earthquake:
    - Earthquakes occur without warning. Some earthquakes are instantaneous tremors and others are significant sustained events followed by aftershocks. Once a significant earthquake begins, department personnel must take immediate action. Department personnel should take initial emergency action to protect their personal safety during the initial quake and additional actions will be implemented after the quake stops.
    - An earthquake may cause noticeable shaking of the ground and building. This shaking may vary in intensity (i.e., mild tremors to shaking sufficient to destroy buildings.).
    - When a significant earthquake occurs, occupants should immediately take cover. Potential locations inside buildings that may provide cover include:
        1. Standing in a doorway and bracing your hands and feet against each side.
        2. Getting under a desk or heavy table.
        3. Standing flat against an interior wall.
    - Once the shaking has stopped, department personnel must follow procedures for emergency evacuation.
    - Be prepared for aftershocks. Although smaller than the main shock, aftershocks cause additional damage and may bring weakened structures down. Aftershocks can occur in the first hours, days, weeks, or even months after the quake. Follow the same procedures as for earthquakes.
    - The Department Emergency Coordinator or designated alternate will provide guidance of further action.

12. The Director of Emergency Services should notify the County Manager and Chairman of the Board of Supervisors regarding the continuance of work in the building during a severe weather event and appropriately notify department personnel.

Bomb Threat/Terrorist Threat

1. This section should be implemented in the event of a bomb threat or report of a suspicious package or object.
2. A person who becomes aware of a bomb threat (via telephone call, e-mail or a letter) or observes a suspicious package or object must notify the Department Emergency Coordinator or designated alternate immediately.
3. If the threat is made by telephone, ascertain (by asking the caller) as much information as possible about the bomb and its location, such as:
    - Exact location of the bomb?

- When is the bomb going to explode?
- What kind of bomb is it?
- Why was it placed?
- Who is speaking?

4. Provide information to the Department Emergency Coordinator or designated alternate.
5. The Department Emergency Coordinator or designated alternate will immediately notify the Director of Emergency Services and local law enforcement via the 911 emergency systems.
6. A decision will be made by the Department Emergency Coordinator or designated alternate and the Director of Emergency Services, to the extent possible as personal safety, time and capabilities permit, to determine if a building evacuation is warranted. If it is warranted, evacuation should take place immediately.
7. Department personnel should not touch any suspicious or unfamiliar objects.
8. If an explosion does occur, department personnel should leave the building using the general emergency evacuation plan.

Workplace Violence

1. This section should be implemented in the event any type of workplace violence.
2. If department personnel become aware of a violent act by the sounds of an explosion, gunfire, scuffling, or by observation of violent events that could only be intentional acts of violence must immediately notify the Department Emergency Coordinator or designated alternate and law enforcement via the 911 emergency systems.
3. The Department Emergency Coordinator or designated alternate will attempt to notify everyone in the department and adjacent departments, to the extent possible as personal safety, time and capabilities permit, that a perpetrator of workplace violence is in the building.

4. Different types of workplace violence require different actions:

- Explosion - If an explosion occurs, evacuate according to fire/explosion guidelines.
- Gunfire - If you become aware of gunfire occurring in the building, exit through a safe means of egress or take refuge in a secure room that can be locked. The room should also provide limited visibility to anyone that is outside the room. Secure the door and hide under a desk, in a closet or in the corner. Do not leave the room for any reason until police have searched the building and given you permission to leave the room.
- Physical Threat - If someone's actions pose a physical threat to you, notify others immediately in the area, including the Department Emergency Coordinator or designated alternate and law enforcement, as necessary.

- Toxic or Irritant Gas - Immediately evacuate the building using fire evacuation guidelines.
- Hostage Situation - Immediately vacate the area, take no chances to endanger the life of the hostage. Notify the Department Emergency Coordinator or designated alternate and law enforcement.
- In the event someone is hurt and/or a fire is caused by these events, follow guidelines for the type of emergency once the threat from violence has been eliminated.

Fire Prevention

1. Fire protection provisions are in place to support proper employee safety and property protection in the event of a fire. Fire protection systems in place at the facility can include sprinkler systems, smoke detectors, pull boxes and fire extinguishers.
2. Major workplace fire hazards must be addressed first. These fire hazards pose the largest threat of employee injury and property damage at the facility. The major fire hazards and their controls are listed in Appendix B. These major fire hazards are visually inspected on a quarterly basis.
3. Fire extinguishers are the first line of defense in the control of small fires, which could occur in the workplace. Fire extinguishers are located around the facilities for employee use in the event of a fire. Fire extinguishers are for use only against small, incipient stage fires. Always initiate notification means and evacuation prior to fire extinguisher use.
4. Only those employees trained and confident to use a fire extinguisher are permitted to do so. Fire extinguishers are to be used only when it is safe to do so. All other employees are instructed to notify the Department Emergency Coordinator or designated alternate and others in the area immediately upon discovery of a fire and evacuate the facility.
5. The use of fire extinguishers follow these guidelines:
   - Fire extinguishers are mounted and identified with signs or markings to promote their ready access and use.
   - Fire extinguishers are selected and located according the potential fire hazards and size/degree of the fire in the work area.
6. Fire extinguishers will be properly maintained to ensure they function in the event of a fire. The maintenance of fire extinguishers will follow these guidelines:
   - Monthly Visual Inspection
   - Annual Maintenance Inspection
   - Hydrostatic Testing (frequency based on the type of fire extinguisher)
7. All other fire protection equipment will be inspected and tested on a routine basis, such as annually.

Training

1. All employees are provided with training on the emergencies, which they may encounter within the workplace. Training is conducted:
   - At the time of their initial job assignment.

- On an annual basis.
- As needed, to continually ensure employees understand the emergency procedures.

2. Training includes:
   - Requirements of the OSHA Standards covering Emergency Evacuation and Fire Protection.
   - Potential emergencies at the facility.
   - Means to report and methods to be informed of a facility emergency.
   - Designated emergency procedures.
   - Evacuation routes, emergency exits and designated meeting points.
   - Types of fire hazards in the facility.
   - Fire extinguisher training for personnel authorized to use extinguishers will include:
     1. Types of fire extinguishers and fire protection systems in the facility.
     2. Principles and limitations of fire extinguisher use.
     3. Proper use of fire extinguishers.

Program Evaluation

1. The Department Emergency Coordinator or designated alternate and the Director of Emergency Services will review the program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. The program will be updated, as needed, to reflect any changes in the program.

APPENDIX A

DEPARTMENT SAFETY AND EMERGENCY INFORMATION

DEPARTMENT SAFETY AND EMERGENCY INFORMATION

Department: **Location:**

Director of Emergency Services: Raymond Thatcher Phone #s-873-3660(office)

Emergency Phone Number: 911 (EMERGENCIES)

Internal Emergency Notification: Verbal Paging System Pull Station Air Horn

Department Emergency/Safety Coordinator(s)	Roles and Responsibilities
Primary Coordinator:	**Evacuation:** (1) Sweep office to ensure all employees are evacuated (2) Account of all department employees (and visitors) at designated meeting area (3) Coordinate status with Director of Emergency Services and/or emergency responses personnel. **Other Emergencies:** (1) Coordinate appropriate responses for the department.
Alternate Coordinator:	

Nearest Emergency Pull Box:

Nearest Fire Extinguisher:

Nearest First Aid Kit:

Other Emergency Equipment:

Evacuation: See Department Evacuation Map

(1) Stop what you are doing and shut down equipment, if time safely permits.	**(3)** Report immediately to your designated meeting area and check in with the department emergency coordinator.
(2) Proceed to the primary emergency exit or secondary exit, if the primary is blocked.	**(4)** Remain at the meeting area until provided with further instruction.

Safety Responsibilities:

1. Follow established safety, health and emergency policies and guidelines as established for the County and your department.
2. Immediately report to your Department Emergency/Safety Coordinator any work-related injuries or illnesses, unsafe conditions or emergency situations that threaten workplace safety.

APPENDIX B

DEPARTMENT FIRE HAZARDS

Department	Major Fire Hazard	Location	Fire Protection in Place
Public Works	3.1 WELDING	Throughout Facility	• Hot Work Permit/Hot Work Area • Welding Screens • Fire Extinguisher(s) • Designated Welding Areas
Public Works	Compressed Gases (Flammable)	Various Storage Locations	• Segregation of Incompatibles • Fire Extinguisher(s) • Capped/Secured Cylinders
Public Works	Flammable Spray Booth	Highway Garage Building	• Fire Suppression System
Public Works	Gas/Diesel Fuel Station	Highway Garage Building Exterior	• No Smoking Signs • Fire Suppression System
Public Works	Fuel Oil Tank	Sign Shop	• Fire Extinguisher(s)
Public Works	Oil Storage Room	Highway Garage	• Segregation of Incompatibles • Fire Extinguisher(s)
Public Works Buildings and Ground	Flammable Liquid Containers	Shop (Building and Grounds)	• Fire Extinguisher(s)
Public Works Buildings and Ground	Oxygen/Acetylene Equipment	Inside B&G Building and Other Locations	• Hot Work Permit Program • Fire Extinguisher(s)
Public Works Buildings and Ground	Welding Activities	Inside B&G Building and Other Locations	• Hot Work Permit Program • Fire Extinguisher(s)
Horace Nye	Propane Gas Storage Tank	Outside Building	• Flammable Placards • Fenced Area
Horace Nye	Oxygen/Gas Storage	Outside Building	• O2 Storage Placards • Locked Building
Horace Nye	Flammable Liquid Containers	Maintenance Shop	• Fire Extinguisher(s) • Hot Work Permit Program
Fisheries	Fuel Oil Tank (2)	Inside Main Building Inside Egg Building	• No Smoking Signs • Chemical ID Labels • Portable Fire Extinguishers

Fisheries	Flammable Liquid Containers	Storage Building	• Portable Fire Extinguishers
Fisheries	Propane Gas Storage Tank	Outside Building	• Flammable Placards • No Smoking Signs
Jail	Propane Gas Storage Tank (bulk tank)	Outside Building	• No Smoking Signs • Traffic Barriers
Jail	Propane Gas Storage Tank (small tank)	Outside Building	• No Smoking Signs

Hazard Communication

Written Guideline

1. Essex County is committed to ensuring that all employees are informed of and understand the hazards associated with the chemicals they may encounter in the workplace.
2. Hazard information is transmitted to employees through:
    - Container labeling.
    - Material Safety Data Sheets (MSDSs).
    - Employee training.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
    - Support the policies and guidelines of the program.
2. Department Heads or designated Department Safety Coordinators are responsible to:
    - Oversee the policies and procedures of the program.
    - Provide guidance on the requirements of the program.
    - Ensure that an MSDS is requested from the supplier/manufacturer as part of the approval to purchase chemicals for the department.
    - Review and approve MSDSs for all chemicals to be brought in and used in the department by contractors.
    - Obtain, review and maintain MSDSs for the Department.
    - Supervise container labeling requirements.
    - Maintain a chemical inventory.
    - Provide or coordinate hazard communication training.
    - Evaluate the effectiveness of the program on an annual basis.
3. Employees are responsible to:
    - Understand the chemical hazards in their job and effective means to protect themselves.
    - Follow established hazard communication procedures.
    - Report any program inconsistencies.
4. Contractors are responsible to:
    - Follow established hazard communication guidelines while working in the department.
    - Provide copies of MSDSs for all chemicals to be brought in and used in the department.

Hazard Communication Guidelines

Applicability

1. The hazard communication program applies to all departments.

Container Labeling

1. All chemical containers in county facilities must be properly labeled. These labels will readily display:
   - Identity or name of the chemical.
   - Appropriate hazard warnings.
   - Manufacturer or distributor of chemical.
2. Containers are labeled according to the following guidelines:
   - Labels will be in written form in English.
   - Visual symbols or signs (such as flammability or corrosivity symbols) may be used for better recognition of chemical hazards.
   - Container labels will not be removed unless the container will be immediately relabeled.
3. Labeling of in-house chemical containers will utilize the Hazardous Materials Identification System (HMIS), or similar, which ranks a hazard on flammability, health hazard and reactivity. This system may also provide guidance on the appropriate personal protective equipment to be used.
4. Labels can be obtained from the Department Head or designated Department Safety Coordinator.
5. All piping containing hazardous materials in the department will also be labeled or otherwise marked to identify its contents.

Material Safety Data Sheets

1. Material Safety Data Sheets (MSDSs) are obtained for all chemicals used in County facilities. MSDSs are procured as follows:
   - All chemical purchases are approved by the Department Head or designated Department Safety Coordinator.
   - An MSDS is requested with all shipments of chemicals.
   - Upon receipt of the chemical, MSDSs are forwarded to the Department Head or designated Department Safety Coordinator for review and approval.
   - Upon approval, the chemical may be used in the department.
   - If a MSDS is not received or the MSDS is not approved, the chemical will not be used in the department.
   - New or updated MSDSs will be placed in the department MSDS binder.
2. All MSDSs are reviewed and approved by the Department Head or designated Department Safety Coordinator prior to the chemical's use in the department. This review evaluates the chemical information to ensure the proper safety and health

precautions (such as proper personal protective equipment, employee training and storage requirements) are taken prior to use of the chemical.

3. All MSDSs for the department are maintained in the department's MSDS binder. Copies of these MSDSs are accessible to employees on all shifts for their use as a chemical safety and health reference.
4. At least annually, the department MSDSs will be checked against the department's chemical inventory list.
5. Each department will remove and archive outdated MSDSs to an archived MSDS file.

Other Hazard Communication Guidelines

1. The Department Head or designated Department Safety Coordinator will maintain a current inventory of all chemicals used or stored in the department. The chemical inventory will be updated at least annually.
2. Employees assigned to perform non-routine tasks (such as confined space entry) which may involve hazardous chemicals will receive additional training to ensure they have proper knowledge and equipment to safely perform the task.
3. Contractors must follow similar hazard communication guidelines while working in the department.
   - Contractors are provided with access to MSDSs for those chemicals encountered as part of their work in the department.
   - Before the start of a project, contractors must submit copies of MSDSs for all chemicals to be brought in and used in the department. These MSDSs will be reviewed and approved by the Department Head or designated Department Safety Coordinator prior to the chemicals entering the department.

Information and Training

1. All employees are provided with information and training on the chemicals which they encounter within the workplace. Training is conducted:
   - At the time of their initial job assignment.
   - Whenever new chemicals or hazards are introduced into the area.
   - As needed, to continually ensure employees understand the hazards of those chemicals in their work area.
2. Hazard Communication training includes the following topics:
   - Requirements of the Hazard Communication Standard.
   - Means to obtain information on the hazards of chemicals in their work area, including the use and understanding of the container labeling and MSDS systems.
   - Operations in the work area where hazardous chemicals are used.
   - Hazards associated with those chemicals in their work area.
   - Hazards associated with chemicals in unlabeled pipes.
   - Means to detect the presence or release of chemicals in their work area.
   - Means employees can take to protect themselves from chemicals in their work area.

- Location of the written Hazard Communication Program, chemical inventory and MSDSs for their location.

Program Evaluation

1. The Department Head or designated Department Safety Coordinator will review the hazard communication program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. The program is updated, as needed, to reflect any changes in the program.

APPENDIX A

DEPARTMENT CHEMICAL INVENTORY

Chemical Inventory

Chemical Name	Manufacturer

Bloodborne Pathogens Exposure Control

Written Guideline

1. Essex County is committed to ensuring that effective provisions are in place to eliminate or minimize occupational exposure to bloodborne pathogens associated with work activities. These goals will be met through:
   - Determination of employee exposure.
   - Implementation of various methods of exposure control, including:
     1. Standard precautions.
     2. Engineering and work practice controls.
     3. Personal protective equipment.
     4. Housekeeping.
   - Hepatitis B vaccination.
   - Post-exposure evaluation and follow-up.
   - Communication of hazards to employees and training.
   - Record keeping.
   - Investigation, documentation and follow-up to exposure incidents.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Department Heads and designated Department Safety Coordinators are responsible to:
   - Oversee the policies and procedures of the program.
   - Provide guidance on the requirements of the program.
   - Oversee and review periodic inspections.
   - Conduct periodic inspections of the department.
   - Coordinate initial and annual training for department staff.
   - Coordinate program evaluations.
3. Department of Public Health personnel are responsible to:
   - Oversee the policies and procedures of the program.
   - Designate personnel to fulfill the duties of the Department of Public Health Infection Control Nurse (ICN).
   - Provide guidance on the requirements of the program.
   - Conduct periodic inspections of the departments.
   - Review PPE and engineering controls used by departments.
   - Conduct initial and annual training.
   - Conduct program evaluations.
   - Develop modification of written programs.
   - Evaluate the overall effectiveness of the program on an annual basis.
4. Employees are responsible to:
   - Follow established provisions in the program.

- Immediately report potential exposure incidents.
- Report any program inconsistencies.

Bloodborne Pathogens Exposure Control Guidelines and Methods of Compliance

Applicability

1. The bloodborne pathogens exposure control program applies to personnel in the following departments:
   - Department of Public Health
   - Horace Nye
   - Office of Aging
   - Buildings and Grounds
   - Mental Health
   - Probation
   - Social Services
   - Sheriff

Employee Exposure Determination

1. Employees are considered to have an occupational exposure if it can be reasonably anticipated that they may have exposure to blood or other potentially infectious material (OPIM) in the course of their job duties.
2. Each Department Head or designated Department Safety Coordinator in consultation with the Department of Public Health will determine which job titles and job tasks represent categories with reasonably anticipated occupational exposure.
3. A listing of the job titles by departments which have been determined to have potential occupational exposure to blood or OPIM are included in Appendix A.
4. Employees may request an additional review of their job title/job tasks by notifying the Department Head or Department Safety Coordinator in writing of the specific job tasks which they feel includes a potential for an occupational exposure to blood or OPIM.

Standard Precautions

1. All personnel will follow standard precautions to prevent potential exposure to blood and OPIM. Standard precautions will be defined as the practice of treating all blood and body fluids, except sweat, as if they were infected with a bloodborne disease.

Exposure Control Plan

1. All personnel covered under the bloodborne pathogens standard must follow the guidelines of this program.
2. All employees have an opportunity to review this plan at any time during their work shifts by contacting the Department Head or Department Safety Coordinator.

Engineering and Work Practice Controls

1. Engineering and work practice controls will be used, as feasible, to prevent or minimize exposure to bloodborne pathogens.
2. Engineering controls include, but are not limited to, the following:
   - Sharps disposal containers (puncture resistant).
   - Needless systems.
   - Self sheathing needles.
   - Shatter-resistant sample containers.
   - Splash guards.
   - Bio-safety cabinets.
3. Safe work practices include, but are not limited to, the following:
   - Providing readily accessible hand washing facilities.
   - Washing hands immediately or as soon as feasible after removal of gloves.
   - At non-fixed sites, which lack hand-washing facilities, providing interim hand washing/sanitizing measures, such as antiseptic towelettes and hand sanitizers.
   - Washing body parts as soon as possible after skin contact with blood or OPIM.
   - Prohibiting the recapping or bending of needles.
   - Prohibiting the shearing or breaking of contaminated needles.
   - Using biohazard labels.
   - Prohibiting eating, drinking, and smoking, applying cosmetics or lip balm and handling contact lenses in work areas where there is a likelihood of occupational exposure.
   - Prohibiting food and drink from being kept in refrigerators, freezers, shelves, cabinets or on counter tops or bench tops where blood or other potentially infectious materials are present.
   - Requiring that all procedures involving blood or other potentially infectious materials are performed in such a manner as to minimize splashing, splattering, and generation of droplets of these substances.
   - Placing specimens of blood or other potentially infectious materials in a container, which prevents leakage during collection, handling, processing, storage, transport or shipping.
4. New technology for handling needles and sharps will be evaluated and implemented whenever possible to further prevent accidental needle sticks and cuts.
5. Engineering controls (i.e., sharps disposal containers) will be inspected and maintained or replaced by the Department Safety Coordinator monthly or whenever necessary to prevent overfilling.
6. Each department will determine the need for changes in engineering controls and work practices through:
   - Review of OSHA records.
   - Employee interviews.
   - Safety committee activities.
   - Incident reviews.

Personal Protective Equipment

1. Personal protective equipment (PPE) will be used to protect personnel from exposure to blood or OPIM. PPE is provided to all employees at no cost.
2. Types of PPE available to employees to minimize potential exposure to blood and OPIM include the following:
   - Gloves
   - Gowns
   - Apron
   - Biohazardous waste containers
   - Masks
   - Eye protection (splash-proof goggles, safety glasses with side shields)
   - Resuscitation bags and one-way breather shields/mouthpieces
3. PPE is furnished in a variety of sizes and is made readily available to all employees.
4. Each employee with potential occupation exposure to blood or OPIM is assigned a bloodborne pathogens personal protective equipment kit at time of hire.
5. All employees using PPE must observe the following precautions:
   - Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
   - Remove PPE after it becomes contaminated and before leaving the work area.
   - Used PPE must be disposed of properly.
   - Wear appropriate gloves when it can be reasonably anticipated that there may be hand contact with blood or OPIM and when handling or touching contaminated items or surfaces.
   - Wear appropriate gowns and aprons when it can be reasonably anticipated that there may be splashing or body contact with blood or OPIM.
   - Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
   - Never wash or decontaminate disposable gloves for reuse.
   - Wear appropriate face and eye protection (splash-proof goggles, safety glasses with side shields, masks, etc.) when splashes, sprays, splatters, or droplets of blood or OPIM pose a hazard to the eye, nose or mouth.
   - Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way to avoid contact with the outer surface.
   - Use appropriate resuscitation bags and/or one-way breather shields/mouthpieces during any mouth-to-mouth activities.
   - Inspect PPE prior to use and frequently during use.
   - Replace damaged PPE immediately.

Handling and Disposal of Potentially Infectious Materials

1. Biohazardous and/or medical waste generated by County employees will be disposed of properly.

2. Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and labeled or color-coded appropriately.
3. Medical waste containers (sharps containers) must be kept upright throughout use, replaced routinely, closed when moved, and not allowed to be overfilled.
4. Only approved sharps containers will be used by personnel.
5. Prior to disposal, sharps containers will have the lid secured. Department name and date will be placed on the container and it will be placed in a designated secure area for collection and disposal.
6. Broken glassware, which may be contaminated, will only be picked up using mechanical means, such as tongs, forceps, or a brush and dust pan.
7. Fluorescent orange or orange-red warning labels are attached to:
   - Refrigerators and freezers containing blood and other potentially infectious materials.
   - Sharps disposal containers.
   - Other containers used to store, transport, or ship blood or other potentially infectious materials.
8. Warning labels are not required when:
   - Red bags or red containers are used.
   - Containers of blood, blood components, or blood products are labeled as to their contents and have been released for transfusion or other clinical use.
   - Individual containers of blood or other potentially infectious materials are placed in a labeled container during storage, transport, shipment or disposal. The warning label must be fluorescent orange or orange-red, contain the biohazard symbol and the word "BIOHAZARD" in a contrasting color, and be attached to each object by string, wire, adhesive, or other method to prevent loss or unintentional removal of the label.
9. The Department Head or Department Safety Coordinator shall refer all questions regarding warning labels, red bags, and disposal of contaminated materials to the Department of Public Health.
10. Personnel are to notify the Department Head, Department Safety Coordinator and the Department of Public if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.
11. The Department of Health will be responsible for the collection and disposal of all biohazard materials.

Hepatitis B Vaccination

1. The Department of Public Health will provide training to all participating employees on Hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.
2. The Hepatitis B vaccination series is available at no cost to affected personnel after training.
3. The Hepatitis B vaccination series is available within 10 days of initial assignment to job tasks identified in the exposure determination (Appendix A).
4. Vaccination is encouraged unless:

- Documentation exists that the employee has previously received the series.
- Antibody testing reveals that the employee is immune.
- Medical evaluation shows that vaccination is contraindicated.

5. If an affected employee chooses to decline the vaccination, the employee must sign a declination form. Appendix B contains the Declination form.
6. Employees who decline may request and obtain the vaccination at a later date at no cost.
7. Documentation of refusal of the vaccination is kept in the employee's personnel file.
8. The Department Head or Department Safety Coordinator will coordinate vaccination through the Department of Public Health.

Post Exposure Evaluation and Follow-Up

1. Should an exposure incident involving blood or OPIM occur during business hours, immediately contact your Department Head or Department Safety Coordinator. The Department Safety Coordinator will immediately contact the Department of Public Health Infection Control Nurse (ICN).
2. If an exposure incident occurs after hours, on weekends or holidays, contact the Department of Public Health Supervising Community Health Nurse on call to discuss the exposure incident. If the employee has been found to be at risk, the employee may need to go to the emergency room (ER) for further evaluation.
3. An immediately available confidential medical evaluation and follow-up will be conducted by DPH ICN or, if after hours, by ER personnel. Following the initial first aid (i.e., clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed by the ICN or ER personnel:
   - Document the routes of exposure and how the exposure occurred.
   - Employee health and vaccination status reviewed (see employee exposure follow-up record).
   - Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
   - Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
   - If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
   - Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
   - After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
   - If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible**.**

Administration of Post-Exposure Evaluation and Follow-Up

1. The DPH ICN will ensure that health care professional(s) responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.
2. The DPH ICN will also ensure that the health care professional evaluating an employee after an exposure incident receives the following:
   - A description of the employee's job duties relevant to the exposure incident.
   - Route(s) of exposure.
   - Circumstances of exposure.
   - If possible, results of the source individual's blood test.
   - Relevant employee medical records, including vaccination status.
3. The DPH ICN will provide the employee with a copy of the evaluating health care professional's written option within 15 days after completion of the evaluation (see employee exposure follow-up record).

Evaluating the Circumstances Surrounding an Exposure Incident

1. The Department Head or Department Safety Coordinator will ensure that all exposure incidents are investigated in accordance with the County's accident reporting and investigation guideline.
2. The DPH ICN will assist the Department Head and Department Safety Coordinator by reviewing the circumstances of all exposure incidents to:
   - Complete and maintain a sharps injury log (contaminated percutaneous injury).
   - Review engineering controls in use at the time.
   - Review work practices followed.
   - Determine any devices being used.
   - Determine protective equipment or clothing that was used at the time of the exposure incident (i.e., gloves, eye shields, etc.).
   - Review the location of the incident (i.e., clinic room, patient's home, etc.).
   - Determine procedures being performed when the incident occurred.
   - Review employee's training.
3. If the DPH ICN, Department Head or Department Safety Coordinator determine that revisions need to be made to the program, the ICN will ensure that appropriate changes are made and communicated to affected personnel.

Training

1. All employees who have occupational exposure to bloodborne pathogens will receive training conducted by the DPH ICN. Training is conducted:
   - At the time of their initial job assignment.
   - On an annual basis.
   - As needed, to continually ensure employees understand the emergency procedures.
2. Training includes:

- Discussion on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases.
- Review and explanation of the OSHA standard.
- An explanation of the program and how to obtain a copy.
- Explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- Discussion of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
- Explanation of the basis for PPE selection.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the signs and labels and/or color-coding required by the standard and used by the county.

Record Keeping

1. Training records are documented for each employee upon completion of training. These records will be kept for at least three (3) years in the employee's personnel file.
2. The training records will include:
   - Date of the training session.
   - Summary of the training.
   - Name and qualifications of persons conducting the training.
   - Names and job titles of all persons attending the training sessions.
3. Employee training records will be provided upon written request to the employee or the employee's authorized representative within 15 working days.
4. Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.20 (Access to Employee Exposure and Medical Records).
5. Medical records will be maintained confidential and must be retained for at least the duration of employment plus 30 years.
6. Employee medical records will be provided upon written request of the employee or to anyone having written consent of the employee within 15 working days.
7. All exposure incidents will be evaluated against OSHA recordability and documented on appropriate OSHA forms, as necessary.

Program Evaluation

1. The Department of Health, Department Head and designated Department Safety Coordinator will coordinate the review of the program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. The program will be updated, as needed, to reflect any changes in the program.

APPENDIX A:

BLOODBORNE EXPOSURE DETERMINATION

Essex County
Bloodborne Pathogens - Exposure Determination

Department	Job Task
Building and Grounds	Building Maintenance Helper
Building and Grounds	Maintenance Mechanic
Building and Grounds	Maintenance Person
Building and Grounds	Maintenance Supervisor
Building and Grounds	Superintendent of Buildings and Grounds
Building and Grounds	Watchperson
Horace Nye Home	Cleaner
Horace Nye Home	Director of Nursing
Horace Nye Home	Facility Aide
Horace Nye Home	Head Nurse
Horace Nye Home	Housekeeper
Horace Nye Home	Laundry Worker
Horace Nye Home	Leisure Time Activities Aide
Horace Nye Home	Leisure Time Activities Director
Horace Nye Home	Licensed Practical Nurse
Horace Nye Home	Maintenance Mechanic
Horace Nye Home	Maintenance Supervisor
Horace Nye Home	Maintenance Person
Horace Nye Home	Assistant Director of Nurses
Horace Nye Home	Nursing Assistant
Horace Nye Home	Physician
Horace Nye Home	Registered Professional Nurse
Horace Nye Home	Supervising Nurse
Horace Nye Home	Maintenance Person
Horace Nye Home	Assistant Director of Nurses
Mental Health	Assistant Director of Community Mental Health Services
Mental Health	Director of Community Mental Health Services
Mental Health	Psychiatric Social Worker
Mental Health	Supervising Community Mental Health Therapist
Mental Health	Supervising Psychiatric Social Worker
Mental Health	Caseworker
Office for the Aging	Director, Office for Aging
Office for the Aging	Senior Aging Services Aide
Office for the Aging	Specialist, Services for the Aging
Probation	Probation Assistant
Probation	Probation Director I
Probation	Probation Officer

Department	Job Task
Probation	Probation Officer Trainee
Probation	Senior Probation Officer
Probation	Probation Supervisor
Probation	Juvenile Specialist
Public Health	Community/Public Health Nurse
Public Health	Director of Patient Services
Public Health	Handicapped Children's Services Specialist
Public Health	Licensed Practical Nurse
Public Health	Public Health Director
Public Health	Registered Professional Nurse
Public Health	Supervising Community/Public Health Nurse
Public Health	WIC Program Coordinator
Public Health	WIC Program Nutritionist
Sheriff	Chief Deputy Sheriff
Sheriff	County Sheriff
Sheriff	Deputy Sheriff
Sheriff	Deputy Sheriff/Civil Officer
Sheriff	Deputy Sheriff/Jailer
Sheriff	Physician
Sheriff	Undersheriff
Social Services	Caseworker
Social Services	Homemaker
Social Services	Motor Vehicle Operator
Social Services	Senior Caseworker
Social Services	Parent Aide

APPENDIX B:

HBV DECLINATION FORM

Essex County
Hepatitis B Vaccine Declination
(Appendix A to Sec. 1910-1030 – Mandatory)

Employee's Name:_____SS#:_____

Department:_____

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination 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 or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee's Signature:_____Date:_____

Public Health Representative's Name:_____

Representative's Signature:_____Date:_____

Lockout/Tagout

Written Guideline

1. Essex County is committed to ensuring that employees are properly protected from injury resulting from the unexpected startup or energizing the equipment during service and maintenance activities.
2. These goals will be met through:
   - Established lockout/tagout procedures.
   - Employee training.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Department Heads or designated Department Safety Coordinators are responsible to:
   - Oversee the policies and procedures of the program.
   - Provide guidance on the requirements of the program.
   - Coordinate the development of equipment specific lockout/tagout procedures.
   - Coordinate all lockout/tagout activities.
   - Conduct periodic inspections.
   - Authorize shift lockout/tagout change over.
   - Coordinate lockout/tagout training.
   - Evaluate the effectiveness of the program on an annual basis.
3. Employees are responsible to:
   - Follow established lockout/tagout procedures.
   - Report any program inconsistencies.
4. Contractors are responsible to:
   - Become aware of the Essex County lockout/tagout procedures for equipment.
   - Coordinate lockout/tagout procedures with Essex County personnel.
   - Implement their lockout/tagout procedures.

Lockout/Tagout Guidelines

Applicability

1. The lockout/tagout program applies to personnel in the following departments:
   - DPW – All
   - Horace Nye – Maintenance Only

   NOTE: Provisions for the prohibition of unauthorized lockout/tagout removal apply to all departments.

2. Lockout/tagout procedures apply to all service or maintenance activities on machinery or equipment where the unexpected start-up or energizing the equipment could injure personnel.
3. Normal equipment operations do not typically require lockout/tagout provided:
   - Guards or safety devices are not bypassed.
   - The employee does not place any part of their body into a point of operation where the start up of the equipment would injure the employee.
4. Cord and plug connections, where the unplugging of the equipment controls the energy source, do not require lockout/tagout procedures provided the plug is under the control of the employee (in visible sight).
5. The lockout/tagout procedures are applicable to:
   - **Authorized Employees** - Employees required to perform lockout/tagout procedures to conduct service and maintenance of equipment.
     Note: Only personnel listed in Appendix A by Department and Job Title are Authorized Employees in the Lockout/Tagout Program.
   - **Affected Employees** - Employees working at equipment or in the area of equipment on which service and maintenance will be performed.
     Note: All employees (except Authorized Employees) are considered to be Affected Employees

Locks and Tags

1. Both locks and tags are to be used on energy isolating devices to control all hazardous energy sources prior to any service and maintenance on equipment.
2. All employees performing service and maintenance must apply their locks and tags to the equipment. These locks and tags may only be removed by the employee applying the device. Individual locks/keys have been issued to authorized employees.
3. Locks and tags follow these guidelines:
   - Identifiable to the employee applying the device.
   - Identifiable by color, shape or size for lockout/tagout.
   - Used only for lockout/tagout purposes.
   - Capable of withstanding normal environmental conditions to which they will be exposed.
   - Substantial to prevent removal without the use of excessive force.

   Note: Authorized employees have been issued individual locks/keys for their use however additional locks (including specialty adapters and locking devices) are available.
4. Tags must warn employees against hazardous conditions of energizing the equipment, such as “Do Not Operate.”
5. All other hardware used for lockout/tagout must be appropriate to maintain controls in the desired position.

Written Procedures

1. Established procedures and practices must be used by authorized employees to isolate or otherwise deenergize hazardous energy sources during service and maintenance of equipment.
2. Hazardous energy sources are considered energized when the equipment is connected to an energy source containing residual or stored energy. Hazardous energy sources include, but are not limited to:
   - Electrical
   - Mechanical
   - Hydraulic
   - Pneumatic/Air Pressure
   - Steam
3. All hazardous energy sources will be controlled prior to any service and maintenance on the equipment. This will be conducted with, but not limited to:
   - Lockout/tagout
   - Applying energy isolating devices (such as valve, lever or breaker covers)
   - Physically blocking or securing equipment in place.
   - Releasing stored pressure.
4. Both locks and tags will be used to control hazardous energy sources.
5. When a hazardous energy source cannot be effectively controlled through conventional means, other precautions (such as pulling fuses) will be taken to ensure the equipment is properly controlled.
6. General lockout/tagout procedures include:
   - Notification of affected employees prior to activities.
   - Preparations for shutdown (understand the machine, identify energy sources and isolation methods).
   - Shutdown machine or equipment (turn off or shut down equipment).
   - Isolation of the machine or equipment (apply needed energy isolating devices).
   - Application of lockout/tagout devices (apply lock and tag).
   - Control of stored energy (relieve, disconnect, restrain or otherwise control).
   - Verification of isolation (verify that control is accomplished by testing the equipment and turning controls back off).
7. When work is complete, lockout/tagout release includes:
   - Machine or equipment inspection (components intact, tools removed and guards replaced).
   - Verification of employee safety (verify that employees are away from the equipment).
   - Removal of lockout/tagout devices (remove locks and tags).
   - Notification affected employees prior to equipment starting.
8. Equipment-specific lockout/tagout procedures will be developed for all machinery and equipment requiring lockout/tagout. Appendix B contains a listing of all equipment with lockout/tagout procedures.

9. These written procedures will specifically describe:
   - Potential energy sources.
   - Means to control these energy sources.
   - Lockout/tagout procedures.
   - Method to verify equipment control.

Additional Procedures and Special Circumstances

1. Periodic inspections will be conducted of lockout/tagout procedures to ensure that the policies and procedures are being followed. These inspections are conducted at least annually. Appendix C contains a documentation form for these inspections.
2. Periodic inspections are conducted according to the following guidelines:
   - Conducted by an authorized employee other than the one(s) being inspected.
   - Performed on a representative number and type of lockout/tagout activities.
   - Used to evaluate the proper lockout/tagout procedures.
   - Correct any noted deficiencies in the procedures.
3. All new or modified equipment must be designed to accept an energy isolating/lockout device.
4. If an employee's lockout/tagout device needs to be removed and the employee is no longer in the facility, the following procedures will be used:
   - Verify that the employee applying the device is no longer in the facility.
   - Evaluate the equipment to ensure it is safe to operate.
   - Remove the lockout/tagout device.
   - Make a reasonable attempt to contact the employee to inform them that their lockout/tagout device has been removed.
   - Ensure that the employee is knowledgeable of the removal upon return to work.
5. When lockout/tagout devices must be temporarily removed to test or position equipment, this will be conducted following normal lockout/tagout procedures.
6. When working with outside contractors:
   - Both host employer and contractor will inform the other of the lockout/tagout procedures to be used.
   - Both host employer and contractor will follow lockout/tagout procedures.
7. During shift change, special procedures are followed to ensure the continued lockout/tagout protection between outgoing and incoming employees:
   - One authorized employee from the outgoing shift will leave a lock and tag in place on each isolation device with a multi-lock hasp until the first authorized employee from the incoming shift has placed a lock and tag on each isolation device's multi-lock hasp.
   - The authorized employee from the outgoing shift then will remove the lock and tag from each multi-lock hasp.

Information and Training

1. All employees are provided with information and training on lockout/tagout applicable to their job. Training is conducted:
   - At the time of their initial job assignment.
   - With changes in machines, energy sources or procedures.
   - When periodic inspections reflect inadequacies in employee knowledge or lockout/tagout procedures.
   - As needed, to ensure employees are following established lockout/tagout procedures.
2. **Authorized Employees** are provided with lockout/tagout training to include:
   - Requirements of the Lockout/Tagout Standard.
   - Purpose and function of the lockout/tagout program.
   - Recognition of hazardous energy sources.
   - Type and magnitude of energy sources.
   - Methods and means necessary to control these energy sources.
   - Lockout/tagout rules and special circumstances.
3. **Affected Employees** will be provided with awareness training to include:
   - Purpose and function of the lockout/tagout program.
   - Prohibition of starting equipment under lockout/tagout or lockout/tagout removal.

Program Evaluation

1. The affected Department Heads or designated Department Safety Coordinators will review the program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. The program will be updated, as needed, to reflect any changes in the program.

APPENDIX B

EQUIPMENT-SPECIFIC LOCKOUT/TAGOUT LIST

Essex County
Equipment-Specific Lockout/Tagout List
(as of 1/15/03)

Department	Location	Equipment or Machinery	Drafted	Completion Date
Buildings and Grounds	Inside Building	Boiler	X	
Civil Defense	Outside	AC Unit	X	
Court House	Bath Room	Hot Water Heater		8/19/2002
Court House	Boiler Room	Boiler B1 (Weil-McLain)		8/19/2002
Court House	Boiler Room	Boiler B2 (Weil-McLain)		8/19/2002
Court House	Boiler Room	Boiler Pumps #1		8/19/2002
Court House	Boiler Room	Boiler Pumps #2		8/19/2002
Court House	Boiler Room	Hot Water Pumps #1		8/19/2002
Court House	Boiler Room	Hot Water Pumps #2		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-1)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-10)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-11)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-2)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-3)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-4)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-5)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-6)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-7)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-8)		8/19/2002
Court House	Roof Top	Roof Top AC Unit (RTU-9)		8/19/2002
DPW	Boiler Room	Boiler #1 (HB Smith)		8/19/2002
DPW	Boiler Room	Boiler #2 (Weil McLain)	X	
DPW	Boiler Room	Condensate System (Pumps)		3/8/2002
DPW	Boiler Room	Unit Heater		3/8/2002

Department	Location	Equipment or Machinery	Drafted	Completion Date
DPW	Boiler Room	Unit Heater #2		
DPW	Boiler Room	Water Heater		3/8/2002
DPW	Buildings and Grounds	Delta Radial Arm Saw	X	
DPW	Buildings and Grounds	Drill Press	X	
DPW	Buildings and Grounds	Plainer	X	
DPW	Buildings and Grounds	Table Saw	X	
DPW	Heated Storage	Air Handler - East	X	
DPW	Heated Storage	Air Handler - West	X	
DPW	Heated Storage	All Tire	X	
DPW	Heated Storage	Band Saw	X	
DPW	Heated Storage	Heater #1		
DPW	Heated Storage	Heater #2		
DPW	Heated Storage	Waste Oil Furnace	X	
DPW	Main Shop	Drill Press	X	
DPW	Main Shop	Duracraft ½ Inch Drill Press	X	
DPW	Main Shop	Gates Hydraulic Machine Update	X	
DPW	Main Shop	Heater A, B, C and D		
DPW	Main Shop	Hoist (Ingersoll Rand)		
DPW	Main Shop	Hunter BL500	X	
DPW	Main Shop	Hydro-Blast Part Washer	X	
DPW	Main Shop	Milwaukee 10 Inch Bench Grinder	X	
DPW	Main Shop	OTC 100 Ton Hydraulic Press	X	
DPW	Main Shop	Overhead Heater #1	X	
DPW	Main Shop	Overhead Heater #2	X	
DPW	Main Shop	Overhead Heater #3	X	
DPW	Main Shop	Overhead Heater #4	X	
DPW	Main Shop	South Bend Lathe	X	
DPW	Main Shop	Vehicle Lift Unit #1	X	
DPW	Main Shop	Vehicle Lift Unit #2	X	
DPW	Main Shop	Westinghouse Electric Shop Welder	X	
DPW	Office	AC Unit	X	
DPW	Office Basement	Boiler (HB Smith)	X	

Department	Location	Equipment or Machinery	Drafted	Completion Date
DPW	Office Basement	Unit Heater	X	
DPW	Oil Room	Air Compressors #1, #2		3/8/2002
DPW	Oil Room	Unit Heater	X	
DPW	Oil Room	Unit Heater #1		
DPW	Sign Shop	Boiler #3 (Weil-McLain)	X	
DPW	Sign Shop	Scotchlite Heat Lamp Applicator	X	
Horace Nye	Basement	Air Compressor #2	X	
Horace Nye	Basement	Air Compressor #3	X	
Horace Nye	Basement	AJAX Dryer #1 (left)	X	
Horace Nye	Basement	AJAX Dryer #2 (right)	X	
Horace Nye	Basement	Huebsch Originators Dryer	X	
Horace Nye	Basement	Sewage Eject Pumps	X	
Horace Nye	Basement	Steam Boiler Condensate Pumps	X	
Horace Nye	Basement	Water Pump #1, #2	X	
Horace Nye	Boiler Room	Air Compressor #1	X	
Horace Nye	Boiler Room	Air Handling Unit (AHU-1)	X	
Horace Nye	Boiler Room	Air Handling Unit (AHU-3)	X	
Horace Nye	Boiler Room	Air Handling Unit (AHU-4)	X	
Horace Nye	Boiler Room	Air Handling Unit (AHU-5)	X	
Horace Nye	Boiler Room	DOM Water Pump #1	X	
Horace Nye	Boiler Room	DOM Water Pump #2	X	
Horace Nye	Boiler Room	Exhaust Fan #2, #3	X	
Horace Nye	Boiler Room	Fulton Steam Boiler	X	
Horace Nye	Boiler Room	Fulton Water Heater	X	
Horace Nye	Boiler Room	Heat Pumps #1, #2, #3, #4	X	
Horace Nye	Boiler Room	Hot Water Pumps #1, #2, #3, #4	X	
Horace Nye	Boiler Room	Oil Pumps #1	X	
Horace Nye	Boiler Room	Oil Pumps #2	X	
Horace Nye	Boiler Room	Webster Boiler #1	X	
Horace Nye	Boiler Room	Webster Boiler #2	X	
Horace Nye	Generator Room	Unit Heater	X	
Horace Nye	Locker Room	Unit Heater	X	
Information Service	Outside	AC Unit	X	

Department	Location	Equipment or Machinery	Drafted	Completion Date
Jail/Probation	Boiler Room	Hot Water Heater	X	
Jail/Probation	Boiler Room	Boiler (Weil-McLain)	X	
Jail/Probation	Roof Top	Roof Top AC Unit #1	X	
Jail/Probation	Roof Top	Roof Top AC Unit #2	X	
Landfill	Garage	Unit Heater #1, #2, #3, #4	X	
Landfill/Recycling Station	Landfill	Unit Heater #1, #2, #3, #4		
Landfill/Recycling Station	Recycling	Boiler		
Landfill/Recycling Station	Recycling	Garbage Compactor #1, #2		
Landfill/Recycling Station	Recycling	Oil Pumps (2) for unit heater		
Landfill/Recycling Station	Recycling	Overhead Doors(3)		
Landfill/Recycling Station	Recycling	Unit Heater #5, #6		
Machine Room	Outside	AC Unit	X	
Main Complex	Boiler Room	Boiler #1 (Weil-McLain)	X	
Main Complex	Boiler Room	Boiler #2 (Weil-McLain)	X	
Main Complex	Emergency Service	Boiler (Weil-McLain)	X	
Main Complex	Emergency Service	Hot Water Heater	X	
Main Complex	Information Service	Boiler (Weil-McLain)	X	
Main Complex	Information Service	Hot Water Heater	X	
Main Complex	Outside	AC Unit	X	
Mental Health	Boiler Room	Boiler #1 (Carrier)	X	
Mental Health	Boiler Room	Boiler #2 (Carrier)	X	
Mental Health	Boiler Room	Boiler #3 (Carrier)	X	
Mental Health	Boiler Room	Hot Water Heater	X	
Mental Health	Outside	AC Unit #1, #2, #3	X	
Nursing Home	Basement	AHU 5		
Nursing Home	Basement	Compressor #1		
Nursing Home	Basement	Compressor #2		
Nursing Home	Basement	Dryer		
Nursing Home	Basement	Elevator Hydraulic Pump		
Nursing Home	Basement	Heat Reclaimer		
Nursing Home	Basement	Pumps (3)		

Department	Location	Equipment or Machinery	Drafted	Completion Date
Nursing Home	Basement	Sewage Eject		
Nursing Home	Basement	Washer #1, #2		
Nursing Home	Boiler Room	AHU 1,3,4		
Nursing Home	Boiler Room	Compressor #3		
Nursing Home	Boiler Room	Condensate Pumps (2)		
Nursing Home	Boiler Room	DOM Water Pump #1, #2		
Nursing Home	Boiler Room	Exhaust Fan #2, #3		
Nursing Home	Boiler Room	Fulton Steam Boiler		
Nursing Home	Boiler Room	Fulton Water Heater		
Nursing Home	Boiler Room	Heat Pump #1, #2, #3, #4		
Nursing Home	Boiler Room	Hot Water Pump (4)		
Nursing Home	Boiler Room	Oil Pumps (2)		
Nursing Home	Boiler Room	Webster Boiler #1		
Nursing Home	Boiler Room	Webster Boiler #2		
Nursing Home	Electrical Room	Unit Heater		
Nursing Home	Locker Room	Unit Heater		
Nutrition	Bath Room	Hot Water Heater	X	
Public Health Armory	Boiler Room	Boiler #1 (Weil-McLain)	X	
Public Health Armory	Boiler Room	Boiler #2 (Weil-McLain)	X	
Public Health Armory	Boiler Room	Hot Water Heater	X	
Public Health Armory	Outside	AC Unit	X	
Recycling	Baler Area	Unit Heater #1, #2	X	
Recycling	Baler Room	(Baler) Pit Conveyor	X	
Recycling	Baler Room	(Baler) PVC Conveyor	X	
Recycling	Baler Room	Baler	X	
Recycling	Baler Room	Overhead Door #1	X	
Recycling	Baler Room	Overhead Door #2	X	
Recycling	Baler Room	Overhead Door #3	X	
Recycling	Outside	Garbage Compactor #1, #2	X	
Social Service	Outside	AC Unit #1	X	
Social Service	Outside	AC Unit #2	X	
Tax Mapping	Outside	AC Unit	X	
Youth Bureau	Boiler Room	Boiler (Weil-McLain)	X	
Youth Bureau	Boiler Room	Hot Water Heater	X	

APPENDIX C

PERIODIC LOCKOUT/TAGOUT INSPECTIONS

Essex County
Lockout/Tagout Inspections

Date of the Inspection:_____

Department:_____ **Location:**_____

Equipment/Machine:_____

Equipment Specific LOTO procedures in place? o Yes o No

Authorized Employee(s): _____ (initials)_____

_____ (initials)_____

Inspector:_____ (initials)_____

Findings: o Acceptable o Unacceptable

_____

_____

_____

Findings: List any deviations from the established general or equipment-specific lockout/tagout procedures. Did the employee(s):

- Understand that there are equipment specific lockout/tagout procedures (i.e., show the inspector the procedure).
- Notify affected persons in the area.
- Familiarize themselves with the equipment (i.e., identify the energy sources to the inspector).
- Turn the machine off at the main controls.
- Isolate all the energy sources at their source.
- Attach necessary control devices, locks and tags.
- Verify the equipment is controlled by testing the equipment.
- Explain the procedures to put the equipment back into service.

Corrective Actions/Follow Up:

_____

_____

Confined Space

Written Guideline

1. Essex County is committed to ensuring that employees who enter confined spaces are protected from the hazards of the space prior to entry and provisions are established if confined space emergencies occur during entry.
2. These goals will be met through:
   - Confined space entry and emergency procedures.
   - Entry permit system.
   - Entry equipment.
   - Employee training.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Department Heads or designated Department Safety Coordinators are responsible to:
   - Oversee policies and procedures of the program.
   - Provide guidance on the requirements of the program.
   - Coordinate the evaluation of confined spaces.
   - Coordinate development of confined space entry procedures.
   - Coordinate all confined space activities within their department.
   - Coordinate or supervise confined space entries.
   - Coordinate confined space training.
   - Coordinate outside emergency and rescue services.
   - Coordinate contractor confined space activities.
   - Maintain and review entry permits.
   - Evaluate the effectiveness of the program on an annual basis.
5. Employees are responsible to:
   - Not enter confined space unless authorized and trained.
   - Follow established confined space entry procedures.
   - Report any program inconsistencies.
6. Contractors are responsible to:
   - Become aware of the Essex County confined space entry procedures.
   - Coordinate confined space entry activities with Essex County personnel.
   - Implement appropriate confined space entry procedures as per OSHA regulatory requirements.

Confined Space Entry Team Roles and Responsibilities:

1. The confined space **Entry Supervisor** is responsible to:
   - Know the hazards that may be encountered during entry, including information on the mode, signs and symptoms and consequences of exposure.
   - Verify, by checking, that appropriate entries have been made on the permit, that all tests have been conducted, and that all procedures and equipment are in place before authorizing the permit.
   - Authorize the permit and entry into the space.
   - Terminate the entry and cancel the permit as necessary per entry procedures.
   - Verify that rescue services are available and that the means to summons them are operable.
   - Remove unauthorized individuals who enter or attempt to enter the space during confined space entry.
   - Ensure that entry operations remain consistent with the terms of the permit and that acceptable entry conditions are maintained through the entry.

   Note: Authorized Entry Supervisors are listed in Appendix A.
2. The confined space **Authorized Entrant** is responsible to:
   - Know the hazards that may be encountered during entry, including information on the mode, signs and symptoms and consequences of exposure.
   - Properly understand and use applicable confined space equipment.
   - Communicate with the attendant, as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert the entrants of the need to evacuate the space.
   - Alert the attendant whenever the entrant recognizes signs and symptoms of exposure to dangerous situations or the entrant detects a prohibited condition.
   - Immediately exit from the space whenever an order to evacuate is given by the attendant or the entry supervisor, the entrant recognizes warning signs and symptoms of exposure to a dangerous situation, the entrant detects a prohibited condition or the evacuation alarm is activated.

   Note: Authorized Entrants are listed in Appendix A.
3. The confined space **Attendant** is responsible to:
   - Know the hazards that may be encountered during entry, including information on the mode, signs and symptoms and consequences of exposure.
   - Be aware of the possible behavioral effects of hazard exposure to authorized entrants.
   - Continuously maintain an accurate head count of authorized entrants in the space.
   - Remain outside the space for the duration of the entry unless relieved by another attendant.
   - Communicate with the authorized entrant, as necessary to monitor entrant status and to alert the entrants of the need to evacuate the space.
   - Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space. Order the entrant(s) to evacuate the space immediately if the attendant detects prohibited conditions, behavioral effects in the authorized entrant, a

condition that could endanger the entrant or the attendant can no longer perform their duties or must leave the space.
- Summon rescue and other emergency services as soon as the attendant determines that the authorized entrants may need assistance to escape from the space.
- Warn and control unauthorized persons from entering the space and immediately notifies the authorized entrant(s) and entry supervisor if this condition arises.
- Perform non-entry rescue.
- Perform no other duties that would interfere with their primary duty to monitor and protect the authorized entrant.

Note: Authorized Attendants are listed in Appendix A.

Confined Space Entry Guidelines

Applicability

1. The confined space entry program applies to the applicable personnel in the following departments:
   - DPW
   - Horace Nye
   - Department of Fisheries

   Note: Provisions for the prohibition of unauthorized confined space entry apply to all departments.
2. Confined spaces are enclosed areas that meet all three of the following conditions:
   - Are large enough and so configured that an employee can bodily enter and perform assigned work.
   - Have limited or restricted means for entry or exit.
   - Are not designed for continuous human occupancy.
3. Permit-required confined spaces are confined spaces that meet any of the following conditions:
   - Contain or have the potential to contain a hazardous atmosphere (such as oxygen deficient/enriched, flammable, toxic, explosive dust or other immediately dangerous to life or health atmospheres).
   - Contain a material that has the potential to engulf the entrant.
   - Have an internal configuration that an entrant can be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward or tapers to a smaller cross section.
   - Contain any other recognized serious safety and health hazard.
4. At Essex County, confined space entry will be applicable when any portion of an employee's body breaks the plane of a permit-required confined space (further referred to as a confined space).
5. At this time, all confined spaces will be entered as permit-required confined spaces.

Confined Space Identification

1. All confined spaces have been identified to determine the type and location of the space. Appendix C contains the confined space inventory.
2. All confined spaces have been labeled with signs reading "Danger - Confined Space - Enter by Permit Only", or similar wording. When labeling is not feasible, affected employees will be specifically trained to recognize these spaces.

Confined Space Entry Permit

1. The confined space entry permit will be utilized for all confined space entries in order to ensure that all parameters for a safe entry are evaluated, controlled and properly documented. Appendix B contains the confined space entry permit.
2. A confined space entry permit must follow these established guidelines:
   - Used for all confined space entries.
   - Completed and authorized by the entry supervisor prior to entry.
   - Authorized for a designated time and duration.
   - Posted at the confined space for the duration of the entry.
3. If at any time during the entry, the space activities go outside the scope of the entry permit, entrants will immediately evacuate the space. The entry supervisor must re-evaluate the space and issue/modify the existing permit prior to reentry.
4. All confined space permits will be closed and returned to the Department Head or designated Department Safety Coordinator following the entry. These permits will be maintained for one (1) year.

Entry Guidelines

1. The following entry guidelines are provided for entry. **Note**: Contact the Department Head or designated Department Safety Coordinator for any entries outside these parameters.
2. Only authorized entrants are allowed to enter the confined space.
3. An attendant must be present during all space entries.
4. All confined spaces must be isolated from mechanical, electrical and material flow hazards inside the space prior to entry. Isolation will be made through:
   - Mechanical and Electrical - Controlled by lockout/tagout.
   - Material Flow - Controlled by blanking and blinding, misaligning or removing sections of lines, pipes and ducts, or other means to protect from release of material.
5. When hazardous atmospheres may be present in the confined space, air monitoring will be utilized to evaluate these conditions. Air monitoring will follow these guidelines:
   - Conducted by the entry supervisor.
   - Tested for oxygen, flammability/explosivity and toxics, in that order.
   - Tested with a calibrated air monitoring device.
   - Tested at all levels in the space.
6. Air monitoring will be conducted at the following frequency:

- Prior to all entries.
- Continuously during all entries where hazardous atmospheres are present or there is the potential for changing atmospheric conditions.
- Periodically (such as every 15 minutes) where there is no potential for atmospheric conditions to change.

7. Acceptable atmospheric entry conditions include:
   - Oxygen - 19.5% - 23.5%.
   - Flammable Gas or Vapor - < 10% of the Lower Explosive Limit (LEL).
   - Explosive Dusts - > 5 foot visibility (obscured vision).
   - Carbon Monoxide - < 35 parts per million (ppm).
   - Hydrogen Sulfide - < 10 ppm.
   - Other Toxic Atmospheres - < OSHA Permissible Exposure Limit (PEL).
8. When unacceptable entry conditions are present in the space, the following guidelines will be followed:
   - Use forced air ventilation to meet acceptable entry conditions.
   - Use personal protective equipment.
   - Flammable, explosive or oxygen enriched atmospheres will not be entered until acceptable entry conditions are met.
9. If at any time during the entry the atmospheric conditions change to an unacceptable level, entrants will evacuate the space immediately. Entry will not be permitted until the space is re-evaluated by the entry supervisor.
10. Mechanical ventilation will be used to purge or continually ventilate a space in order to eliminate or control hazardous atmospheres. Ventilation will either introduce fresh air into the space or evacuate contaminated air from the source inside the space. Ventilation will be utilized:
    - Initially when hazardous atmospheres are present to reduce concentrations to an acceptable condition for entry.
    - Continuously when necessary to control atmospheric hazards.
11. To facilitate non-entry rescue, retrieval systems must be used whenever an authorized entrant enters a confined space. Retrieval system use guidelines include the following:
    - Entrant will be equipped with a chest or full-body harness.
    - Vertical entries greater than 5 feet deep will require the use of mechanical retrieval system designed for non-entry rescue, such as a tripod or davit-arm mounted system.
    - Vertical entries less than 5 feet deep and horizontal entries only require a lifeline attached to the entrant's harness and attached to an anchor point outside the confined space.
    - All retrieval equipment will be designed for confined space entry use and will be equipped with double-locking hardware.
12. The following equipment will also be available, as necessary, during entry:
    - Communication Equipment - Communication between entrant and attendant and attendant and emergency services.
    - Personal Protective Equipment - Provide protection for the entrant(s) as needed based on the hazards and work to be performed.

- Lighting (approved for hazardous locations, as necessary)- Provide adequate lighting to perform work and escape in an emergency.
- Barriers and Shields - Protect entrant(s) from external hazards outside the space.
- Ladders or other Equipment - Safe entry and exit from the space.

Emergency and Rescue Procedures

1. During all confined space entries, an attendant will be positioned outside the space in the event of an emergency. The attendant will continuously observe activities inside and outside the space and notify the entrant to evacuate if deemed necessary.
2. The attendant will be aware of the emergency procedures in place at the facility, including the nearest telephone and emergency phone numbers. In the event of an emergency, the attendant will call for emergency services immediately and notify other personnel for assistance.
3. In an emergency, the attendant is not permitted to enter the space. After contacting the emergency services:
   - Initiate non-entry rescue provisions, that is, removal of an entrant without physically entering the space, as feasible.
   - Conduct air monitoring in the space, if not already being conducted.
   - Gather additional fans to better ventilate the space.
   - Open additional access hatches to facilitate better access for retrieval or ventilation.
4. Outside emergency services will be used to support any confined space emergency. Prior to any entry, these services will be:
   - Informed of the confined spaces and confined space hazards.
   - Provided with access to the space in order to establish appropriate rescue plans.

Contractor Activities

1. All contractors entering confined spaces are required to follow OSHA requirements and the contractor's confined space program, entry procedures and permit system.
2. When contractor employees will be entering confined spaces, the contractor will be:
   - Informed that the workplace contains permit required confined spaces and that entry is only permitted through compliance with proper entry procedures.
   - Notified of space hazards, past experience with the space entry and precautions and procedures in place for the protection of employees in or near the space.
   - Debriefed at the conclusion of the entry regarding any hazards confronted or created during entry.
3. When the contractor is working with or in the same space as host employees, both parties will coordinate their activities to ensure that activities do not endanger the health of other entrants.

Information and Training

4. All employees participating in confined space entry are provided with information and training applicable to their job. Training is conducted:
   - Prior to participation in confined space activities.
   - With changes in space hazards or entry procedures.
   - As needed, to ensure employees are following established confined space entry procedures.
5. Training on the OSHA standard and program requirements is provided to the following levels, based on the role to be performed:
   - Entry Supervisor
   - Authorized Entrant
   - Attendant
6. Training will ensure an understanding, knowledge and skill to perform the duties designated of the level of confined space activity to be performed.

Program Evaluation

1. The Department Head or designated Department Safety Coordinator will review the program, and the past year's entry permits, on an annual basis to ensure the continued effectiveness of these guidelines.
2. The program will be updated, as needed, to reflect any changes in the program.

APPENDIX A

CONFINED SPACE DECISION FLOW CHART

Definition of a Confined Space:		**Definition of Permit Required Confined Space:**	
1.	Is a space large enough and so configured so that an employee can enter and perform work, and;	1.	Contains or has a potential to contain a hazardous atmosphere; or
2.	Has limited or restricted means for entry or exit, and;	2.	Contains a material that has the potential for engulfing and Entrant; or
3.	Is not designed for continuous employee occupancy.	3.	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
		4.	Contains any other recognized serious safety or health hazard.

Is the confined space a permit space?	**NO**	➡	Permit not required. Use other appropriate safe work practices.
⬇ **YES**			
Will the permit space be entered?	**NO**	➡	Prevent employee entry. Do tasks from outside the permit space.
⬇ **YES**			
Can the hazards be eliminated?	**YES**	➡	Permit space may be reclassified to a non-permit required confined space.
⬇ **NO**			
Can the space be maintained in a condition safe to enter by continuous forced air ventilation only? (i.e. is the only hazard atmospheric?)	**YES**	➡	Space may be entered using Alternate Entry Procedures.
⬇ **NO**			
Prepare for entry via permit procedures approved by Entry Supervisor.			
Verify acceptable entry conditions (test results recorded, space isolated if necessary, rescuer/emergency communications available, entrants properly equipped, etc.)	**NO**	➡	Permit not valid until conditions meet permit specifications.
⬇ **YES**			
Acceptable entry condition maintained throughout entry?	**NO**	➡	Emergency exists (prohibited condition) Entrants must evacuate. Permit is void.
⬇ **YES**			
Entry tasks completed. Permit returned and canceled.			

APPENDIX B

CONFINED AUTHORIZED ENTRANTS, ATTENDANTS AND ENTRY SUPERVISORS

Essex County
Confined Space Authorized Entrants, Attendants and Entry Supervisors

Department	Name	Entrant	Attendant	Entry Supervisor

Appendix C

SPACE PERMIT

Essex County
Confined Space Permit

GENERAL INFORMATION	EMERGENCY SERVICES
Confined Space:_____ Location:_____ Purpose of Entry:_____ Date:_____Time:_____to____ This permit is only valid for the specified date and times.	Provided By:_____ Method of Notification: o Phone:_____ o Radio
AUTHORIZED PERSONNEL	**COMMUNICATION**
Entry Supervisor:_____ Attendant(s):_____ Entrant(s): _____ _____ _____ _____ Only authorized entrants can enter confined spaces.	Method of Communication: (Between Entrant and Attendant) o Verbal/Visual o Radio o Other:_____
HAZARDS	**CONTROL PROCEDURES/EQUIPMENT**
Physical Hazards: o Mechanical Hazard/Electrical Hazards o Engulfment Hazard o Configuration Hazard o Hot Work (Permit Required) o Temperature o Others:_____ Atmospheric Hazards: o Oxygen Deficiency/Enrichment o Explosive Gases/Vapors o Explosive Dusts o Hydrogen Sulfide o Carbon Monoxide o Others:_____	Isolation Methods: o Mechanical/Electrical (Lockout/Tagout) o Feed Lines Disconnected/Blocked/Controlled o Other:_____ Atmospheric Controls: o Air Monitoring (Initial or Continuous) o Ventilation (Initial or Continuous) Equipment: o Safety Harness and Lifeline o Mechanical Retrieval Device o PPE_____ o Portable Lighting o Ladder

AIR MONITORING					
Oxygen	19.5 – 23.5%	_____	_____	_____	_____
Explosive Gas/Vapor	<10% LEL	_____	_____	_____	_____
Explosive Dust	> 5' visibility	_____	_____	_____	_____
Hydrogen Sulfide	<10 ppm	_____	_____	_____	_____
Carbon Monoxide	<35 ppm	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
	Time:	_____	_____	_____	_____

Air Monitoring Conducted By:_____

o Check if monitoring is conducted continuously during entry activities.

AUTHORIZATION	CANCELLATION
Entry Authorized By:_____ _____ Name:_____Time:_ _____ Post entry permit at the confined space.	Entry Canceled By:_____ Name:_____Time:_____ Return completed permit to Department Safety Coordinator.

Appendix D

Confined Space Inventory

Essex County
Confined Space Inventory

Department	Location	Description	Procedures
Public Works	Highway Garage	Calcium Chloride Tank	Full Permit Entry Procedures
Public Works	Highway Garage	Former Floor Drain Collection Manhole	Full Permit Entry Procedures
Public Works	Highway Garage	Boiler Stack	Full Permit Entry Procedures
Public Works	Highway Garage	Vehicle Lift Pits	Full Permit Entry Procedures
Public Works	Highway Garage	Gasoline Storage Tank	Full Permit Entry Procedures
Public Works	Highway Garage	Diesel Storage Tank	Full Permit Entry Procedures
Public Works	Highway Garage	Truck Mounted Sander Bodies	Full Permit Entry Procedures
Public Works	Highway Garage	Crusher Hopper	Full Permit Entry Procedures
Public Works	Highway Garage	Aggregate Screen Hopper	Full Permit Entry Procedures
Public Works	Highway Garage	Roll-Off Dumpster Bodies	Tailgates/Doors Closed - Full Permit Entry Procedures Tailgates/Doors Opened and Secured – Not a Confined Space
Public Works	County Fair Grounds	Valve Pit	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	8000 Gallon Septic Tank	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	6000 Gallon Tanker Trailers	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Manholes for Septic Tanks	Full Permit Entry Procedures

Department	Location	Description	Procedures
Public Works	Recycling Center (MRF)	Manholes (2) for Truck Scales	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Pit Conveyor	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Vacuum Roll-off Tankers	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Manholes for Leach ate System	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Bailer Hopper	Full Permit Entry Procedures
Public Works	Recycling Center (MRF)	Garbage Compactors (A and B)	Full Permit Entry Procedures
Horace Nye/100 Court Street Complex	Parking Lot	Manholes for Leach Field System (8)	Full Permit Entry Procedures
Horace Nye/100 Court Street Complex	Lawn (Front)	Manhole 1 for Sewage Pump Station	Full Permit Entry Procedures
Horace Nye	Lawn (Front)	Manhole 2 for Sewage Pump Station	Full Permit Entry Procedures
Horace Nye	Parking Lot	Manhole	Full Permit Entry Procedures
Horace Nye	Cafeteria	Steam Pipe Tunnel/Pipe Chute	Full Permit Entry Procedures
Horace Nye	-	Basement Crawl Space/Under Wing	Full Permit Entry Procedures
Horace Nye	Outside (off unit 3)	Laundry Wastewater Manholes()	Full Permit Entry Procedures
Department of Fisheries	Adjacent to Pond #15	Brood Pond Water Box	Full Permit Entry Procedures

Department	Location	Description	Procedures
100 Court Street Complex	Lawn and Parking Lots	Storm Water Collection Basins	Full Permit Entry Procedures
Horace Nye/100 Court Street Complex	Parking Lot Between Horace Nye and 100 Court Street	Roll-Off Garbage Dumpster	Tailgate/Door Closed - Full Permit Entry Procedures Tailgate/Door Opened and Secured – Not Classified as a Confined Space

Hearing Conservation Program

Written Guideline

1. Essex County is committed to ensuring that employees exposed to elevated noise levels are properly monitored and protected to prevent temporary or permanent noise-induced hearing loss.
2. The goal will be met through:
   - Engineering controls.
   - Noise exposure monitoring.
   - Hearing protection.
   - Audiometric testing program.
   - Employee training and information.
   - Recordkeeping.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Each Department Head or designated Department Safety Coordinator is responsible to:
   - Act as the department administrator of the hearing conservation program.
   - Ensure the policies and procedures of the program are properly implemented and maintained within the department.
   - Coordinate audiometric testing for affected departmental employees.
   - Implement employee exposure evaluations for noise exposure within the department.
   - Coordinate selection of hearing protection for designated uses.
   - Coordinate annual training for affected employees.
   - Periodically evaluate the effectiveness of the program.
3. Employees are responsible to:
   - Follow established safe work practices for hearing protection use.
   - Inspect hearing protection before, during, and after each use.
   - Clean and maintain hearing protection as recommended by the manufacturer.

Hearing Conservation Protocols

Applicability

1. The hearing conservation program currently includes employees with potential exposure to elevated noise exposures in the following departments:
   - Department of Public Works – All
   - Horace Nye – Maintenance
   - Board of Supervisors – Printing Department

- Real Property Department – Machine Folding

2. The following exposure levels will be utilized to evaluate hearing conservation applicability:
   - OSHA Permissible Exposure Limit (PEL) – 90 decibels (dBA), eight-hour Time-Weighted Average.
   - OSHA Action Level – 85 dBA, eight-hour Time-Weighted Average.
3. Specific job tasks or work areas requiring hearing protection and noise monitoring results for affected departments are provided in Appendix A.
4. Employee's voluntary use of hearing protection for exposures below the OSHA action level are not included in the program elements.

Engineering Controls

1. Engineering controls will be used, as feasible, to control employee exposures to noise above the OSHA PEL.
2. When feasible, engineering controls will be used to lower noise exposure below the OSHA action level.
3. When engineering controls are not feasible, or while they are being implemented, hearing protection will be used to protect employees.

Noise Exposure Monitoring

1. Noise exposure monitoring will be conducted to provide an ongoing means of determining employee exposures to noise and determine appropriate engineering controls or hearing protection for elevated noise exposure.
2. Exposure monitoring will be conducted, as appropriate, to evaluate employee noise exposure for comparison to the OSHA action level and PEL.
3. When information indicates that an employee's exposure may equal or exceed an 8-hour time-weighted average (TWA) of 85 dBA (action level), the County will develop and implement an appropriate monitoring program to identify all employees for inclusion in the hearing conservation program and to aid selection of proper engineering controls or hearing protection.
4. At least one week prior to conducting noise monitoring, Essex County will provide the CSEA union representative with notification and will post a notice in each department where noise monitoring will be conducted.
5. Essex County will provide an opportunity for affected employees or their representatives to observe any noise measurements conducted during the noise monitoring.
6. All noise monitoring results will be communicated back to affected employees.
7. Monitoring will be repeated when a substantial change in production, process, equipment or controls occurs.
8. Additional monitoring will be evaluated if the audiometric testing program indicates potential for elevated exposure or inadequate hearing protection in any work area or job title.

Hearing Protection

1. Hearing protection is available to all employees exposed to an 8-hour TWA of 85 dBA or greater.
2. Hearing protection use is required for all personnel conducting job tasks with noise exposure potentially exceeding a TWA of 90 dBA (OSHA PEL). Job tasks that require the use of hearing protection are listed in Appendix A.
3. Hearing protection use also is required for all personnel conducting job tasks with noise exposure potentially exceeding a TWA of 85 dBA if the exposed employee has had a standard threshold shift (STS) as determined by audiometric testing. This information will be communicated individually to the employee.
4. Hearing protection is provided at no cost to employees.
5. A variety of suitable protectors that lower employee exposure to at least an 8-hour TWA of 90 dBA, or 85 dBA or lower for employees who have experienced an STS, are provided for employee use in departments with elevated noise exposures. A list of available hearing protection by type, location and noise reduction rating (NRR) is provided in Appendix A.
6. Hearing protection will be used according to established manufacturer's recommended procedures.
7. The daily use of hearing protection by employees will be overseen by the designated Department Safety Coordinator.

Audiometric Testing Program

1. An audiometric testing program is provided for all employees whose exposures equal or exceed an 8-hour TWA of 85 dBA.
2. Audiometric testing is provided at no cost to employees.
3. Essex County will use the audiometric testing program to ensure that a valid baseline audiogram is established for exposed employees within six (6) months of their first noise exposure. All employees whose exposures equal or exceed an 8-hour TWA of 85 dBA will be required to wear hearing protection for any period prior to establishing a baseline audiogram.
4. All audiometric testing will be performed by a licensed or certified audiologist (or other acceptable professional by OSHA).
5. Audiometric testing will be conducted on an annual schedule for all employees whose exposures equal or exceed an 8-hour TWA of 85 dBA.
6. Essex County will notify employees of the need to avoid high levels of both occupational and non-occupational noise during the 14-hour period immediately preceding the audiometric examination. Hearing protection use will be required if occupational noise exposure can not be avoided during the 14-hour period immediately preceding the audiometric examination.
7. Standard threshold shift (STS) is a change in hearing threshold relative to the employee's baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either

ear with allowance made for the contribution of aging. Determination to be made by the audiometric testing provider.

8. If an annual audiogram shows that an employee has suffered an STS, Essex County may obtain a retest within thirty (30) days and consider the results of the retest as the annual audiogram.
9. The audiologist (or authorized testing professional) will review problem audiograms and shall determine whether there is a need for further evaluation.
10. Essex County will inform employees of the results of audiometric testing in writing, within twenty-one (21) days of the determination.
11. Personnel experiencing an STS are required to use hearing protection as described in the program for noise exposures in excess of the action level (85 dBA).

Hearing Protection Selection

1. Hearing protection will be selected according to the following criteria:
   - Level and characteristics of noise exposure.
   - Noise Reduction Rating (NRR).
   - Frequency/duration of hearing protection use.
   - Worker activities.
   - Limitations of the hearing protection.
2. The following steps will be followed when selecting appropriate hearing protection.
   - When using personal or area monitoring procedures and a sound level meter set to the A-weighing network.
     1. Obtain a representative sound level for the area or TWA for the individual in question.
     2. Subtract 7 dB from the NRR (corrected NRR).
     3. Subtract the corrected NRR from the exposure level to determine the actual exposure (must be less than 90 dBA or 85 dBA for STS).
   - Identify the types of hearing protection that provide protection adequate enough to maintain the exposure below 90 dBA (OSHA PEL).
   - Evaluate any limitation of the hearing protection.
   - Evaluate any other factors (duration of use, fit, conditions of use, etc.).
   - Select appropriate hearing protection to meet the above noted conditions.

Hearing Protection Care and Maintenance

1. All hearing protection will be maintained by the user in accordance with manufacturer's recommendations.
2. Reusable hearing protection will be cleaned and disinfected following each use by the employee in accordance with manufacturer's recommendations.
3. Hearing protection will be stored in a clean, dry and sanitary location.
4. Disposable or single-use hearing protection will be disposed of after each use.

5. Hearing protection will not be altered by the user except for adjusting fit as allowed by the manufacturer. Damaged hearing protection will be immediately discarded.

Information and Training

1. All employees whose noise exposures equal or exceed an 8-hour TWA of 85 dBA will receive hearing conservation training.
2. Hearing conservation training will ensure that employees understand the following:
   - The effects of noise on hearing.
   - Purpose and importance of proper hearing protection use.
   - Limitations and capabilities of hearing protection.
   - The advantages, disadvantages, and attenuation of various types.
   - How to properly use, inspect, maintain and clean the hearing protection.
   - The purpose of audiometric testing.
   - Explanation of audiometric test procedures.
3. Training will be provided at the following frequency:
   - Initially for all new or transferred employees, prior to performing any job tasks covered by the hearing conservation program.
   - Annually for all employees in the hearing conservation program.
   - As deemed appropriate to ensure the continued effectiveness of the program.
4. Copies of the Occupational Noise Exposure standard will be posted in the applicable departments.

Record Keeping

1. The following records will be maintained for the Hearing conservation program:
   - Noise Exposure Records - An accurate record of all employee exposure measurements for at least two years.
   - Audiometric Test Records - All employee audiometric test records will be maintained for the duration of employee employment and include:
     1. Name and job classification of the employee.
     2. Date of the audiogram.
     3. The examiner's name.
     4. Date of the last acoustic or exhaustive calibration of the audiometer.
     5. Employee's most recent noise exposure assessment.
     6. Measurements of the background sound pressure levels in audiometric test rooms.
2. Records required by this program will be provided upon written request to employees, former employees, and representatives designated by the individual employee.

Program Evaluation

1. The Department Head or designated Department Safety Coordinator will review the program on an annual basis to ensure the continued effectiveness of the guideline and protocols.
2. The program will be updated, as needed, to reflect any changes in the program.

Appendix A

Hearing Conservation Information

Essex County
Hearing Conservation Information

Department	Job Task/Area	Noise Exposure Levels (dBA)	Minimum NRR (dB)
DPW	Emergency Generator Room (when operating)	>85 dBA (est.)	29 dB
Horace Nye	Boiler Room	>85 dBA (est.)	21 dB
Horace Nye	Generator Room (when operating)	>85 dBA (est.)	21 dB
Horace Nye	Mechanical Room	>85 dBA (est.)	21 dB
Horace Nye	Kitchen Storage (Air Handling Unit)	≈ 85 dBA (need to confirm)	

OSHA Action Limit – 85 dBA

OSHA Permissible Exposure Limit – 90 dBA

Department	Type of Hearing Protection	Manufacturer	NRR (dB)
DPW	Laserlite	Howard Leight	32 dB
DPW	E-A-R Classic Corded	Aearo	29 dB
DPW	DePlug	DeGil	29 dB

NRR – Noise Reduction Rating

Respiratory Protection Program

Written Guideline

1. Essex County is committed to ensuring that employees potentially exposed to hazardous air contaminants are properly protected through the use of feasible engineering controls and respiratory protection.
2. These goals will be met through the proper:
   - Engineering controls.
   - Exposure monitoring.
   - Respiratory protection.
   - Medical surveillance.
   - Employee training.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the program.
2. Each Department Head or designated Department Safety Coordinator is responsible to:
   - Oversee the policies and procedures of the program.
   - Appoint one individual to act as the Respiratory Protection Program Administrator.
   - Provide guidance on the requirements of the respiratory protection program.
   - Coordinate medical surveillance for affected employees.
   - Ensure medical clearance from the physician for affected employees.
   - Coordinate evaluation of employee exposure to air contaminants.
   - Coordinate selection of appropriate respiratory protection for designated uses.
   - Coordinate employee fit testing, as needed.
   - Coordinate periodic surveillance of work area conditions.
   - Coordinate respiratory protection training for affected employees.
   - Coordinate evaluation the effectiveness of the program.
3. Employees are responsible to:
   - Follow established safe work practices for respirator use.
   - Properly use and maintain required respiratory protection.
   - Promptly report any missing or defective respiratory protection.
   - Clean and inspect respirators before and following each use.

Respiratory Protection Guidelines

Program Administrator

1. The designated Department Safety Coordinator for the DPW will act as the County Respiratory Protection Program Administrator.
2. All respiratory protection activities will be coordinated through the County Respiratory Protection Program Administrator.

Applicability

1. The Respiratory Protection Program applies to applicable personnel in the following departments:
   - DPW
   - Department of Public Health
   - Department of Emergency Services
2. Employee's voluntary use of dust masks for exposures below the OSHA Permissible Exposure Limit (PEL) are not included in the program elements. Employees using dust masks will be provided with a copy of Appendix D of the OSHA standard (Attachment B).

Engineering Controls

1. Engineering controls will be used, as feasible, to control employee exposures to air contaminants below OSHA PELs.
2. When engineering controls are not feasible, or while being implemented, respiratory protection will be used to control potential employee exposures.

Exposure Monitoring

1. Exposure monitoring will be conducted, as appropriate, to evaluate potential employee exposure to air contaminants in the workplace.
2. Exposure monitoring will be conducted in accordance with the following provisions:
   - According to the monitoring requirements of the chemical-specific OSHA standard for those contaminants with chemical-specific OSHA standards.
   - Contaminants with the potential to exceed the OSHA PEL will be sampled to verify their exposure levels and compared to the OSHA PEL for appropriate actions to control the hazard (i.e., engineering controls) and/or protect employees (i.e., respiratory protection), as necessary.
   - Sampling and analysis will be conducted in accordance with NIOSH and other acceptable sampling and analytical methods. All samples, requiring lab analysis, will be analyzed by an American Industrial Hygiene Association (AIHA) accredited laboratory.
3. Exposure monitoring results will be communicated to the monitored employee and other employees performing similar tasks.

4. The exposure monitoring information for the County is summarized in the respiratory protection information table in Attachment A.

Respiratory Protection

1. Respiratory protection will be selected for use and provided to employees, as necessary, to control potential employee exposure to air contaminants. Job tasks that require the use of respiratory protection are provided in Attachment A.
2. Respiratory protection will be provided to ensure that employee exposure levels are controlled to at least below the established OSHA PELs.
3. Only respirators with NIOSH certification are permitted for use.
4. Respiratory protection will be used according to established procedures. Attachment C contains specific procedures for respiratory use.
5. The daily use of respiratory protection by employees will be overseen by the Department Head or Department Safety Coordinator.
6. Employees who will be wearing tight-fitting respiratory are not permitted to have:
7. Facial hair (including several days of beard growth) that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or
8. Any condition that interferes with the face-to-facepiece seal or valve function.
9. If an employee wears corrective glasses, goggles or other personal protective equipment, such equipment must be worn in a manner that does not interfere with the seal of the facepiece to the face of the user (e.g., corrective lens inserts for full-face respirators, etc.).
10. For all tight-fitting respirators, employees must perform a positive and negative pressure seal checks each time they put on the respirator.
11. If employees will be wearing a loose-fitting facepiece with power air-purifying respirators (PAPRs), a good face-to-face seal is not required and therefore beards will be permitted so long as the unit fits over the beard and does not disturb the normal fit of the unit.
12. Protection factors to be used for respiratory protection are defined in Attachment A.
13. Respirator cartridges will be changed, as necessary, according the schedule described in Attachment A.

Fit Testing

1. Before an employee is permitted to use any respirator with a tight-fitting facepiece, the employee must be fit tested with the same make, model, style, and size of respirator to be used.
2. Employees using a tight-fitting facepiece respirator must pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT). Fit testing must be conducted:
3. Prior to initial use of the respirator.
4. Whenever a different respirator facepiece (size, style, model or make) is used.
5. At least annually thereafter.
6. Additional fit testing may be conducted whenever the employee's physical condition 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.

7. Employees will be given a reasonable opportunity to select a different respirator facepiece if deemed appropriate.
8. Fit test will be administered using an OSHA-accepted QLFT or QNFT protocol:
9. Protection Factor 10 = QLFT or QNFT
10. Protection Factor greater than 10 = QNFT only
11. Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators will be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.
12. QLFT of tight-fitting atmosphere-supplying respirators and tight-fitting PAPR will be accomplished by temporarily converting the respirator user's actual facepiece into a negative-pressure respirator with appropriate filters, or by using an identical negative-pressure air-purifying respirator facepiece with the same sealing surfaces as a surrogate.
13. QNFT of tight-fitting atmosphere-supplying respirators and tight-fitting PAPR will be accomplished by modifying, according to manufacturer's recommendation, the facepiece to allow sampling inside the facepiece in the breathing zone of the user, midway between the nose and mouth. This requirement can be accomplished by installing a manufacturer's permanent sampling probe onto a surrogate facepiece, or by using a manufacturer's sampling adapter designed to temporarily provide a means of sampling air from inside the facepiece.
14. Any modifications to the respirator facepiece for fit testing will be completely removed, and the facepiece restored to NIOSH-approved configuration, before that facepiece can be used in the workplace.

Respirator Selection

1. Respiratory protection will be selected according to the following criteria:
   - Nature of the operation or process.
   - Type of respiratory hazard, including: effects, concentration, OSHA PEL, etc.
   - Frequency/duration of respirator use.
   - Location of the hazardous area in relationship to fresh air.
   - Worker activities.
   - Limitations of the respiratory protection.
   - Protection factor of the respirator.
2. Only NIOSH certified respiratory protection will be selected.
3. The following steps will be followed when selecting appropriate respiratory protection.
   - Identify if OSHA has a specific standard for the air contaminant. If so, follow the selection process noted in the standard.
   - Identify the air contaminant.
     Note: If oxygen deficiency is noted, supplied-air respirators with escape back up are required.
   - Determine if respirator cartridges or disposable respirators are available to filter the air contaminant (proper warning properties, maximum use concentration, etc.).

Note: If cartridges or disposable respirators are not available, supplied-air respirators are required.

- Identify the exposure level (exposure monitoring).
  Note: If concentration exceeds the immediately dangerous to life and health (IDLH) concentrations or maximum use concentration, supplied-air respirators with escape back up are required.
- Determine the protection factor (air concentration divided by the PEL) necessary to reduce employee exposure to below the OSHA PEL.
- Identify the types of respiratory protection (NIOSH approved) that meet this protection factor.
- Evaluate any limitation of the respiratory protection.
- Evaluate any other factors (duration of use, type of work load, etc.), as noted above.
- Select appropriate respiratory protection to meet the above noted conditions.

4. Respiratory protection will be selected by the Respiratory Protection Program Administrator.
5. Dust masks may be used to control nuisance dusts when the OSHA PEL is not exceeded.

Care and Maintenance

1. Respiratory protection will be cleaned and disinfected by the employee after each use.
2. Respirators will be stored in a clean, dry and sanitary location following use. This includes a plastic bag or respirator case.
   - Respiratory protection will be inspected by the employee prior to each use and during cleaning.
3. Defective respirators will be reported immediately to the Program Administrator.
4. Only the Respirator Protection Program Administrator may repair damaged respirators. Only approved respirator replacement parts will be used to repair damaged respirators and only according to manufacturer's recommendations.

Medical Surveillance

1. All employees required to wear respiratory protection will participate in the medical surveillance program.
2. All medical surveillance will be performed under the supervision of a physician or licensed health care professional (LHCP). The physician or LHCP will be provided with a copy of the OSHA standard, if necessary, respiratory protection program and specific information on the type of respirators to be worn and workplace conditions.
3. Only those employees that are deemed "physically fit" to wear respiratory protection will be allowed to utilize respiratory protection.
4. Initial medical examinations will be conducted prior to fit testing or respirator use for all new or transferred employees required to wear respiratory protection. The contents of the examinations will be established by a physician or LHCP, but will meet at least the minimum requirements of the OSHA standard for respiratory protection (29 CFR 1910.134 Appendix C).

5. The physician will provide a written opinion of the employees ability to wear respiratory protection including:
   - Any limitations of respirator use.
   - Any follow up medical evaluations.

   Note: A copy of the written opinion will be provided to the employee.
6. A medical review will be conducted on an annual basis for all employees in the program. The contents of the review will be established by a physician or LHCP.
7. A more frequent medical review will be conducted when:
   - Employee reports signs and symptoms related to their ability to wear a respirator.
   - Conditions of respirator use change.

Supplied Air Respirators

1. All employees required to use supplied-air respirators (SAR) will be provided with breathing air-quality air.
2. Compressed breathing air must meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:
   - Oxygen content (v/v) of 19.5-23.5%.
   - Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less.
   - Carbon monoxide (CO) content of 10 ppm or less.
   - Carbon dioxide content of 1,000 ppm or less.
   - Lack of noticeable odor.
3. Compressors used to supply breathing air to respirators must be constructed and situated so as to:
   - Prevent entry of contaminated air into the air-supply system.
   - Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg.C) below the ambient temperature.
   - Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions.
   - Have a tag containing the most recent change date and the signature of the person authorized by the employer to perform the change. The tag shall be maintained at the compressor.
   - For compressors that are not oil-lubricated, the employer shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.
   - For oil-lubricated compressors, the employer shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.
4. Breathing air couplings must be incompatible with outlets for nonrespirable work site air or other gas systems.
5. Breathing airlines must meet the NIOSH respirator certification for the respirator used.

Information and Training

1. All employees required to wear a respirator, except voluntary use of a dust mask, will participate in respiratory protection training.
2. Training will ensure that employees understand the following:
   - OSHA Respiratory Protection Standard.
   - Purpose and importance of proper respirator use.
   - Limitations and capabilities of respiratory protection.
   - How to properly use, inspect, maintain and clean the respirator.
   - Medical signs and symptoms that effect the use of the respirator.
3. Training will be provided at the following frequency:
   - Initially for all new or transferred employees, prior to performing any job tasks requiring respiratory protection.
   - Annually for all affected employees.
   - As deemed appropriate to ensure the continued effectiveness of the program.

Recordkeeping

1. Essex County will retain written information regarding medical evaluations, fit testing, and the respirator program in order to facilitate employee involvement in the respirator program, assist the employer in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.
2. The Department Head or Department Safety Coordinator must maintain the following:
   - Records of Medical Evaluations - Must be retained for the duration of employee employment plus thirty (30) years and made available in accordance with 29 CFR 1910.1020 and the county's recordkeeping guidelines.
   - Records of the Qualitative and Quantitative Fit Tests Records should be maintained until the next fit test and include:
     1. The name or identification of the employee tested.
     2. Type of fit test performed.
     3. Specific make, model, style, and size of respirator tested.
     4. Date of test.
     5. The pass/fail results.
   - Written Copy of the Current Respirator Program.

Program Evaluation

1. The Respirator Protection Program Administrator will review the program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. Periodic surveillance of work area conditions will be made by the Respirator Protection Program Administrator to continually evaluate the conditions of respirator use.
3. The program will be updated, as needed, to reflect any changes in the program.

ATTACHMENT A

RESPIRATORY PROTECTION USE

Essex County
Respiratory Protection Information

Department	Job Task/Area	Potential Contaminant(s) and Estimated/Actual Exposure Level	Required Respiratory Protection
Public Works	Spray Painting in Paint Booth	TDI – Not Tested Toluene – Not Tested Acetone – Not Tested Methyl Alcohol – Not Tested	• Full-face supplied air respirator. • Half-face or full-face air purifying respirator with organic vapor cartridges and pre-filter – For short duration (<15 minutes) non-TDI painting.
Public Works	Welding	Welding Fumes – Not Tested Stainless Steel[1] (Cadmium Chromium, Manganese and Nickel) - < OSHA PEL Lead[2] – Not Tested	• P100 Welding Dust Mask – Not required, but recommended during welding operations.
[1] Stainless steel welding sampled on 5/19/99. Cadmium - <0.002 mg/m^3 (PEL - 0.005 mg/m^3), Chromium - 0.06 mg/m^3 (PEL – 1.0 mg/m^3), Manganese - 0.24 mg/m^3 (PEL – 1.0 mg/m^3), Nickel – 0.10 mg/m^3 (PEL – 1.0 mg/m^3). [2] Welding on surfaces coated with lead-based paints are not authorized for routine operations. Special procedures are required for these activities.			
Public Works	Sand Blasting	Silica – Not Tested Lead[1] – Not Tested	• Loose-fitting supplied-air respirator with blast hood
[1] Sand-blasting on surfaces coated with lead-based paints are not authorized for routine operations. Special procedures are required for these activities.			
Public Works	Brake Cleaning and Repair	Asbestos – Not Tested	
Public Works	Road Sweeping	Total Dust[1] - < OSHA PEL	• N95 Dust Mask – Not required, but available for use.
[1] Road sweeping sampled on 5/5/94. Total dust – 1.5 mg/m^3 (PEL - 15 mg/m^3), Silica - < 5%.			
Fisheries	Chemical Water/Fish Treatment (formalin)	Formaldehyde[1] - < OSHA PEL	• None recommended.
[1] Formalin treatment sampled on xx/xx/xx. Formaldehyde – xx ppm (STEL – 2 ppm).			

OSHA PEL – Permissible Exposure Limit
OSHA STEL – Short Term Exposure Limit

Types of Respirators Available	Models Available	Protection Factor (Based on ANSI 288-2 – 1992)	Fit Testing
Tight-Fitting, Full-Face Supplied Air Respirator (SAR) in Constant Flow	Survivair Model 9855-02	1000	Quantitative
Tight-Fitting Half-Face Air Purifying Respirator (APR) with	Survivair Series 2000 Blue 1	10	Qualitative or Quantitative

Types of Respirators Available	Models Available	Protection Factor (Based on ANSI 288-2 – 1992)	Fit Testing
Cartridges			
Tight-Fitting Full-Face Air Purifying Respirator (APR) with Cartridges	Survivair Series 3000	10 or 100	Qualitative Quantitative
Tight-Fitting Half Face Supplied Air Respirator (SAR) in Constant Flow	Survivair Model 9810-02	50	Quantitative
Loose-Fitting Supplied Air Respirator SAR) with Blast Hood	MSA – Blastfoe	25	Not Required
N95/P100 Dust Respirator	3M N95 Respirators (DPH)	10	Qualitative (Not required for voluntary use below the OSHA PEL)
Cartridges	P100 Filter Cartridges/Dust Filters	Change out schedule for P100 cartridges or dust filters: When breathing resistance is detected inside the mask.	
	Organic Vapor Cartridges	Change out schedule for organic vapor cartridges: After 8 hours of use or detected breakthrough of the contaminant.	

ATTACHMENT B

VOLUNTARY USE OF DUST MASKS

Essex County
Information for Employees Using Respirators When Not Required Under the Standard
(Appendix D to Sec. 1910.134 - Mandatory)

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, of if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

ATTACHMENT C
STANDARD USE PROCEDURES

Essex County
Half-Face Air Purifying Respirator (APR)
Standard Use Procedures

Putting On the Respirator:

1. Inspect the respirator and respirator components:
   - Configuration of the facepiece for deformities.
   - Presence of the inhalation and exhalation valves.
   - Presence and condition of the cartridge holder O-ring.
   - Condition and elasticity of the straps and headband harness.
   - Condition of respirator cartridges. Proper respirator cartridges.
2. Put the respirator on:
   Note: Employee must be clean shaven at all points of the face to facepiece seal. Safety glasses must not interfere with the straps, nosepiece or headband harness.
   - Comfortably seat the facepiece over the face and chin.
   - Attach the straps and headband over the head.
   - Adjust the tightness of the straps.
3. Verify the respirator is sealed properly by conducting a positive and negative pressure check. Note: Conduct this check each time the respirator is removed.
   - Positive Pressure Check - Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.
   - Negative Pressure Check - Close off the inlet opening of the cartridges by covering with the palm of the hands, inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.
4. Change respirator cartridges according to the designated change-out schedule.

Taking Off the Respirator:

1. Take off the respirator:
   - Loosen and/or unclip the respirator straps and pull the mask away from the face.
   - Wash face.
2. Clean and disinfect the respirator:
   - Remove the respirator cartridges. Discard, as needed.
   - Wash respirator in warm water with mild detergent.
   - Rinse thoroughly in clean water and shake off excess water.
   - Clean respirators with a disinfectant respirator wipe.

- Hand-dry with a clean lint-free cloth and allow to dry.
- Replace respirator cartridges. Inspect the respirator and respirator components, as noted above.

3. Place in a clean storage bag.
4. Store in a clean and dry location at room temperature.

Essex County
Full Face Air Purifying Respirator (APR)
Standard Use Procedures

Putting On the Respirator:

1. Inspect the respirator and respirator components:
   - Configuration of the facepiece for deformities.
   - Presence of the inhalation and exhalation valves.
   - Presence and condition of the cartridge holder O-ring.
   - Condition and elasticity of the straps and headband.
   - Condition of respirator cartridges. Proper respirator cartridges.
2. Put the respirator on:
   Note: Employee must be clean shaven at all points of the face to facepiece seal.
   - Comfortably seat the facepiece over the face and chin.
   - Attach the straps and headband over the head.
   - Adjust the tightness of the straps.
3. Verify the respirator is sealed properly by conducting a positive and negative pressure check. Note: Conduct this check each time the respirator is removed.
   - Positive Pressure Check - Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.
   - Negative Pressure Check - Close off the inlet opening of the cartridges by covering with the palm of the hands, inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.
4. Change respirator cartridges according to the designated change-out schedule.

Taking Off the Respirator:

1. Take off the respirator:
   - Loosen and/or unclip the respirator straps and pull the mask away from the face.

- Wash face.

2. Clean and disinfect the respirator:
   - Remove the respirator cartridges. Discard, as needed.
   - Wash respirator in warm water with mild detergent.
   - Rinse thoroughly in clean water and shake off excess water.
   - Clean respirator with a disinfectant respirator wipe.
   - Hand-dry with a clean lint-free cloth and allow to dry.
   - Replace respirator cartridges.
3. Inspect the respirator and respirator components, as noted above.
4. Place in a clean storage bag.
5. Store in a clean and dry location at room temperature.

Essex County
Full Face Supplied-Air Airline Respirator (SAR)
Standard Use Procedures

Putting On The Respirator:

1. Inspect the respirator and respirator components:
   - Configuration of the facepiece for deformities.
   - Presence of the inhalation and exhalation valves.
   - Presence and condition of the O-rings in connections.
   - Condition and integrity of the supply hoses.
   - Condition and integrity of the regulator and support harness components.
   - Condition and function of emergency bypass for regulator.
   - Condition and elasticity of the straps and headband.
   - Condition of airline connection.
   - Source of Grade D Breathing Air.
2. Put the respirator on:
   Note: Employee must be clean shaven at all points of the face to facepiece seal.
   - Attach and adjust airline regulator support harness/belt.
   - Comfortably seat the facepiece over the face and chin.
   - Attach the straps and headband over the head.
   - Adjust the tightness of the straps.
   - If possible conduct seal checks in accordance with #3 below.
   - Connect to breathing air source.
3. Verify the respirator is sealed properly by conducting a negative and positive pressure check. Note: Conduct this check each time the respirator is removed.
   - Negative Pressure Check - Close off the inlet opening of the low-pressure regulator hose by covering with the palm of the hands, inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. If the

facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

- Positive Pressure Check - Close off the exhalation valve and the low-pressure supply hose. Exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.

Taking Off the Respirator:

1. Take off the respirator:
   - Loosen and/or unclip the respirator straps and pull the mask away from the face.
   - Disconnect from breathing air source.
   - Remove regulator/respirator airline regulator support harness/belt.
   - Wash face.
2. Clean and disinfect the respirator:
   - Wash respirator and system components in warm water with mild detergent.
   - Rinse thoroughly in clean water and shake off excess water.
   - Clean respirator facepiece with a disinfectant respirator wipe.
   - Hand-dry with a clean lint-free cloth and allow to dry.
3. Inspect the respirator and respirator components, as noted above.
4. Place in a clean storage bag.
5. Store in a clean and dry location at room temperature

Essex County
Blast Hood Supplied-Air Airline Respirator (SAR)
Standard Use Procedures

Putting On the Respirator:

1. Inspect the hood respirator and respirator components:
   - Configuration of the hood for deformities or damage.
   - Presence and condition of the O-rings in connections.
   - Condition and integrity of the supply hoses.
   - Condition and integrity of the regulator and support harness components.
   - Condition and function of emergency bypass for regulator.
   - Condition and elasticity of the support headband.
   - Condition of airline connection.
   - Source of Grade D Breathing Air.
2. Put the respirator on:
   - Attach and adjust airline regulator support harness/belt.

- Comfortably seat the hood over the head, face and chin.
- Adjust the headband to fit the head.
- Connect to breathing air source and verify air flow to hood.

Taking Off the Respirator:

1. Take off the respirator:
   - Clean or vacuum the outside of the blast hood to remove dirt and debris prior to removal.
   - Disconnect from breathing air source.
   - Loosen and/or unclip the hood straps and pull the hood from the head.
   - Remove regulator/respirator airline regulator support harness/belt.
   - Wash face.
2. Clean and disinfect the respirator:
   - Wipe respirator and system components with wet cloth to remove dirt.
   - Clean respirator facepiece with a disinfectant respirator wipe.
   - Hand-dry with a clean lint-free cloth and allow to dry.
3. Inspect the respirator and respirator components, as noted above.
4. Place in a clean storage bag.
5. Store in a clean and dry location at room temperature.

Essex County
Disposable Dust Respirator
Standard Use Procedures

Putting On the Respirator:

1. Inspect the respirator and respirator components:
   - Configuration of the facepiece for deformities.
   - Presence of the exhalation valves (if equipped).
   - Condition and elasticity of the straps and headband harness.
   - Condition of the filtering facepiece.
2. Put the respirator on:
   Note: Employee must be clean shaven at all points of the face to facepiece seal. Safety glasses must not interfere with the straps, nosepiece or headband harness.
   - Comfortably seat the facepiece over the face and chin.
   - Attach the straps and headband over the head.
   - Adjust the tightness of the straps and nosepiece.
3. Verify the respirator is sealed properly by conducting a positive pressure check.
   Note: Conduct this check each time the respirator is removed.

- Positive Pressure Check - Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.

4. Change the respirator according to the designated change-out schedule.

Taking Off the Respirator:

1. Take off the respirator:
   - Loosen and/or unclip the respirator straps and pull the mask away from the face.
   - Wash face.
2. Dispose of the respirator.

Personal Protective Equipment

Written Guideline

1. Essex County is committed to ensuring that employees are provided with and utilize proper personal protective equipment (PPE) to protect themselves from chemical and physical hazards in the workplace.
2. These goals will be met through the proper:
   - Workplace PPE Hazard Assessment.
   - Selection of PPE.
   - Training of Employees.
   - Use of PPE.
   - Care and Maintenance of PPE.

Program Responsibilities:

1. The Board of Supervisors is responsible to:
   - Support the policies and guidelines of the PPE program.
2. Each Department Head or designated Department Safety Coordinator is responsible to:
   - Oversee the policies and procedures of the PPE program.
   - Provide guidance on the requirements of the PPE program.
   - Coordinate the completion and certification of the Workplace Hazard Assessments.
   - Select and make available appropriate PPE.
   - Coordinate PPE training.
   - Evaluate the effectiveness of the program on an annual basis.
3. Employees are responsible to:
   - Follow established PPE procedures.
   - Properly use and maintain required PPE.
   - Promptly report any damaged or defective PPE.

Personal Protective Equipment Guidelines

Applicability

1. The personal protective equipment program applies to applicable personnel in the following departments:
   - DPW – All.
   - Horace Nye.
   - Board of Supervisors – Print Shop.
   - Department of Fisheries.

2. PPE specific to bloodborne pathogens control, respiratory protection and hearing conservation are covered in their respective program.

Workplace Hazard Assessment

1. A workplace hazard assessment has been conducted to evaluate and determine those hazards present in the workplace that require the use of PPE to protect the safety and health of the employee. Where hazards are identified, appropriate PPE has been selected to protect the employee from the hazard.
2. Department Heads or designated Department Safety Coordinators will coordinate the performance and certification of the workplace hazard assessments.
3. The workplace hazard assessment identifies hazards and protection for the:
   - Eyes and Face
   - Ears (Hearing Conservation Program)
   - Lungs (Respiratory Protection Program)
   - Head
   - Skin/Body
   - Hands
   - Feet
4. The workplace hazard assessment identifies exposure to basic hazard categories including:
   - Impact
   - Heat
   - Penetration
   - Harmful dust
   - Compression (roll over)
   - Light (optical) radiation
   - Chemical
5. The written Workplace Certification of Hazard Assessment Form is used to document the hazard assessment. Appendix A contains the specific PPE Hazard Assessments.

General PPE Guidelines

1. All PPE is selected to provide appropriate protection against the potential chemical and physical hazards. As applicable, PPE is selected that meets established design criteria (i.e., ANSI guidelines).
2. PPE is provided in several sizes to accommodate use by all employees.
3. PPE is available from and distributed by each department.
4. Employees are required to use the PPE selected for their particular job.
5. All PPE must be inspected prior to use for defects or damage.

6. Defective or damaged PPE will be replaced prior to use. Only authorized personnel, such as the Department Safety Coordinator, should repair damaged equipment and only when recommended by the manufacturer.
7. All PPE should be cleaned following each use.
8. PPE will be stored in a clean and dry location when not in use.
9. Contractors are required to wear the PPE designated for the area they will be working in as well as any additional PPE required for the tasks they are performing.

Specific PPE Guidelines

1. Eye and face protection is to be used when the eyes and face are exposed to hazards from flying particles, liquid chemicals, acids or caustic liquids or light radiation.
2. All eye protection must have side shields or side protection.
3. When employees are exposed to intense light radiation, such as from welding or torch cutting, appropriate lens filters, gloves and full body protection will be used.
4. Hearing protection will be used in accordance with the Hearing Conservation Program.
5. Respiratory protection will be addressed in the PPE hazard assessment and will be used in accordance with the Respiratory Protection Program.
6. Head protection will be used when the head is exposed to potential injury from falling objects, striking the head on an object or contact with electrical hazards.
7. Skin/Body protection will be used when the skin or body is exposed to potential injury from chemical or physical hazards.
8. Hand protection will be used when the hand is exposed to potential injury from chemical contact, temperature extremes or sharp objects.
9. Foot protection will be used when the foot is exposed to potential injury from falling or rolling objects, objects piercing the sole or contact with electrical hazards.

Training

1. All employees required to use PPE are provided with PPE training. Training will be conducted:
   - At the time of the initial job assignment.
   - With changes in PPE.
   - As needed, to continually ensure employees understand the proper use of the required PPE.
2. Training on PPE includes the following topics:
   - Review of the Workplace Hazard Assessments.
   - What PPE is required?
   - When PPE is required to be used.
   - How to properly wear and use the PPE.

- Limitations of the PPE.
- Proper care, maintenance and disposal of PPE.

3. All PPE training includes an employee demonstration of use proficiency.

Program Evaluation

1. The Department Heads or designated Department Safety Coordinator will coordinate review of the program on an annual basis to ensure the continued effectiveness of the guideline and procedures.
2. The program will be updated, as needed, to reflect any changes in the program.

3.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Fairgrounds

Task Description: Electrical Repair – installation/repair of electrical connections

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Overhead contact/impact with objects	Head	Hard hat
Flying materials	Eye	Safety glasses with side shields
Electrical shock	All	Training and use electrical hazard boots
Impact on feet, equipment rolling over feet	Feet	Safety shoes
Abrasion to hands	Hands	Work gloves

4.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Fairgrounds

Task Description: General building repair work, including use of hand/power tool, clean up debris.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials due to use of hand/power tool	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves when handling materials
Impact on feet / equipment rolling over feet	Feet	Safety shoes

5.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Fairgrounds

Task Description: Lawn Mowing and Trimming – using riding/push mower, trimming using hand/power tool.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials and dust from mowing	Eyes	Safety glasses with side shields
Flying materials from trimming activities	Eyes	Safety goggles or goggle gear Face shield with safety glasses and side shields
Abrasion to hands	Hands	Work gloves when handling materials
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from lawn mowing and trimming	Ears	Hearing protection
Exposure to vehicle traffic in or near parking lots and driveways	All	Use of reflective high visibility vests

6.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Bridge Maintenance and Repair – Flag person

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic	Head	Hard hat
Flying materials due to traffic	Eyes	Safety glasses with side shields
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

7.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Bridge Maintenance and Repair – General work including drilling, fabricating steel, timber deck replacement, repair concrete and use of hand/power tool.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials	Head	Hard hat
Flying materials due to use of hand/power tools, fabricating steel and timber work	Eyes	Safety glasses with side shields
Exposure to air contaminants during welding or disturbance of lead-based paints	Lungs	Refer to Respiratory Protection Program for respirator requirements. Refer to Safety and Health Policies and Guidelines (Page-77) for Lead-Based Paints
Cut and abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest
Wet concrete burns to skin	Hands, feet, skin	Gloves, boots and work clothing to prevent skin contact with wet concrete
Noise from drill hammering and other noisy operations	Ears	Hearing protection
Falls from 4’ or higher	All	Fall protection

8.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Bridge Maintenance and Repair – Leading edge work

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials	Head	Hard hat
Flying materials due to traffic	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Fall hazard when working on exposed edges greater than 4’ high	All	Harness or other appropriate fall protection
Traffic	All	High-visibility safety vest

9.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Bridge Maintenance and Repair – Operating excavator, loader and backhoe.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic	Head	Hard hat shall be used when outside of an operator cab.
Flying materials due to traffic	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

10.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Bridge Maintenance and Repair – Welding

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials	Head	Hard hat or welding helmet
Flying materials due to welding, UV light	Eyes	Welding helmet, safety glasses with side shields, lenses with proper shade for welding activities
Cut and abrasion to hands	Hands	Work gloves
Exposure to air contaminants from welding and disturbance of lead-based paint	Lungs	Refer to Respiratory Protection Program for respirator requirements. Refer to Safety and Health Policies and Guidelines (SHPG-17) for Lead-Based Paint
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

11.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Ditch Cleaning – Flag person/spotter

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling/flying materials due to traffic and activities	Head	Hard hat
Flying materials/dust	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest, using seat belt and use caution.

12.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Ditch Cleaning – General equipment operation, operating excavator, grader, water truck, loader and haul truck.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling/flying materials due to traffic and activities	Head	Hard hat shall be used when outside of an operator/vehicle cab.
Flying materials	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves for all personnel
Impact on feet / equipment rolling over feet	Feet	Safety shoes for all personnel
Noise from operating equipment	Ears	Hearing protection
Traffic	All	High-visibility safety vest

13.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Ditch Cleaning – Operating rotary broom

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling/flying materials due to traffic and activities	Head	Use hard hat when outside of an operator cab
Flying materials/dust	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Excessive dust	Respiratory Tract	Dust mask / wetting down area
Traffic	All	High-visibility safety vest, using seat belt and use caution.
Noise with open cab tractors	Ears	Hearing protection

14.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Drainage Repair/Installation and Cleaning Culverts – Flag person

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic and activities	Head	Hard hat
Flying materials due to traffic and activities	Eyes	Safety glasses with side shields
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

15.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Drainage Repair/Installation and Cleaning Culverts – Hand shoveling

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic and activities	Head	Hard hat
Flying materials due to traffic	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes

16.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Drainage Repair/Installation and Cleaning Culverts – operating backhoe, loader and haul truck.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic and activities	Head	Hard hat shall be used when outside of an operator cab.
Flying materials due to traffic and activities	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

17.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Drainage Repair/Installation and Cleaning Culverts – operating plate compactor and assisting personnel.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic and activities	Head	Hard hat
Flying materials due to traffic and activities	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over or impacting feet	Feet	Safety shoes
Equipment noise from plate compactor	Ears	Hearing protection
Traffic	All	High-visibility safety vest

18.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Equipment Repair and Maintenance – Battery removal, repair, installation and battery charging

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Splash of battery electrolyte (acid)	Eyes	Safety goggles or Face shield and safety glasses with side shields
Splash of battery electrolyte (acid)	Skin	Proper work clothing with long sleeves and nitrile or butyl rubber apron
Abrasion to hands	Hands	Work gloves
Hand contact with battery electrolyte (acid)	Hands	Nitrile or butyl rubber gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes

19.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Equipment Repair and Maintenance – General repair work in main shop, including, engine repair, brake repair, tire changing, use of hand/power tool and fabricating work.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials due to use of hand/power tool	Eyes	Safety glasses with side shields
Abrasion/cut to hands	Hands	Work gloves
Hand contact with engine oils and other fluids	Hands	Nitrile gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise during loud operations	Ears	Hearing protection

20.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Equipment Repair and Maintenance – Lift Operation

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling materials	Head	Hard hat
Abrasion to hands	Hands	Work gloves for material handling activities
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Flying materials due to activities	Eyes	Safety glasses with side shields

21.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Guide Rail Repair – Flag person

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic	Head	Hard hat
Flying materials such as road debris, UV-sun	Eyes	Safety glasses with side shields, UV-block safety glasses
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

22.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Guide Rail Repair – Operating backhoe and haul truck.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic	Head	Hard hat shall be used when outside of an operator cab.
Flying materials due to traffic	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

23.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Guide Rail Repair – Rail installation, material handling and use of hand/power tool.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials	Head	Hard hat
Flying materials due to traffic, use of hand/power tool	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest
Noise during loud operations	Ears	Hearing protection

24.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Paving – Flag person

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to traffic	Head	Hard hat
Flying materials such as road debris, UV-sun	Eyes	Safety glasses with side shields, UV-block safety glasses
Impact on feet / equipment roll-over	Feet	Safety shoes
Traffic	All	High-visibility safety vest

25.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Paving – Operating pavers, roller and haul truck, other assisting personnel

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials due to equipment use and traffic	Head	Hard hat should be used when outside of truck cab.
Flying materials such as road debris, UV-sun	Eyes	Safety glasses with side shields, UV-block safety glasses
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Traffic	All	High-visibility safety vest

26.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Roadside Mowing

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling debris due to road traffic	Head	Hard hat
Flying materials from mowing	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from operating mowing machine	Ears	Hearing protection
Noise from mowing operations	Ears	Hearing protection
Traffic	All	High-visibility safety vest

27.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Screen and Crusher Operation – include operating screen and jaw crusher, and assisting personnel.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying/falling materials	Head	Hard hat
Flying materials from screen and crusher	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Equipment noise	Ears	Hearing protection
Dust	Respiratory Tract	Dust mask

28.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Snow Plowing – Driving plow truck, grader and loader

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Impact on feet	Feet	Safety shoes
Cold Temperature	All	Appropriate work clothing for cold temperature conditions
Traffic	All	High-visibility safety vest, using seat belt and use caution.

29.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Tasks involved in Tree and Limb Removal. Such tasks include operating bucket truck, loader, wood chipper, haul truck and chain saw, and other assisting jobs such as the flag person.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling trees, limbs and other debris	Head	Hard hat shall be used by all equipment operators and inmates, when outside of a cab.
Flying materials such as wood dust chips during cutting and chipping	Eyes	Face shields for chain saw and wood chipper operators. Safety glasses with side shields for all other operators and inmates.
Cut and abrasion to hands	Hands	Work gloves for all operators
Impact on feet	Feet	Safety shoes for all operators
Noise from operating chain saw and chipper	Ears	Hearing protection
Fall hazard when operating bucket truck	All	Safety harness should be used when working at high position.
Chain saw cuts to legs	Legs	Chain saw operator must wear safety pants/chaps
Catch or snag on equipment	All	No loose clothing shall be worn. Properly fitted clothes should be used.
Wood dust from using chain saw	Respiratory Tract	Chain saw operators shall use dust masks when necessary.

30.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Tree and Limb Removal – Flag Person/Equipment Spotter

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling trees, limbs and other debris due to traffic	Head	Hard hat
Flying materials such as wood chips and other debris due to traffic	Eyes	Safety glasses with side shields
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Equipment/traffic noise	Ears	Hearing protection
Traffic	All	High-visibility safety vest

31.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Tree and Limb Removal – Operating bucket truck, loader and haul truck and others assisting tree and limb removal operation.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling trees, limbs and other debris	Head	Hard hat shall be used by all equipment operators and inmates, when outside of an operator cab.
Flying materials such as wood dust chips during cutting and chipping	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves for all operators and material handling personnel
Impact on feet / equipment rolling over feet	Feet	Safety shoes for all personnel
Noise from operating chain saw and equipment	Ears	Hearing protection
Fall hazard when operating bucket truck	All	Safety harness for fall protection in bucket
Traffic	All	High-visibility safety vest

32.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Tree and Limb Removal – operating chain saw

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling trees, limbs and other debris	Head	Hard hat
Flying materials such as wood dust chips during cutting	Eyes	Face shields and safety glasses with side shields
Cut and abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from operating chain saw	Ears	Hearing protection
Chain saw cuts to legs	Legs	Safety pants / chaps
Catch or snag on equipment	All	Properly fitted clothes and no loose clothing.
Wood dust from using chain saw	Respiratory Tract	Chain saw operators shall use dust masks when necessary.

33.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Tree and Limb Removal – operating wood chipper

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling trees, limbs and other debris	Head	Hard hat
Flying materials such as wood dust and chips during cutting / chipping	Eyes	Face shields and safety glasses and side shields
Cut and abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from operating wood chipper and equipment	Ears	Hearing protection
Catch or snag on equipment	All	Properly fitted clothes and no loose clothing.

34.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Winter Sand Cleanup – hand brooming and shoveling sand

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling/flying materials due to traffic	Head	Use hard hat
Flying materials such as sand/salt dust	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Contact with chemicals / poisonous plants	Hands	Nitrile rubber gloves
Impact on feet / equipment roll-over	Feet	Safety shoes
Excessive sand/salt dust	Respiratory Tract	Dust mask
Cold Temperature	All	Appropriate work clothing for cold temperature conditions
Traffic	All	High-visibility safety vest, using seat belt and use caution.

35.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Winter Sand Cleanup – operating sweeper and rotary brooms

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Falling/flying materials due to traffic	Head	Use hard hat when not in the operator/vehicle cab
Flying materials such as sand/salt dust	Eyes	Safety glasses with side shields.
Abrasion to hands	Hands	Work gloves
Contact with chemicals / poisonous plants	Hands	Nitrile rubber gloves
Impact on feet	Feet	Safety shoes
Sand / salt dust	Respiratory Tract	Dust mask (recommended use)
Cold Temperature	All	Appropriate work clothing for cold temperature conditions
Noise from loud operations	Ears	Hearing protection
Traffic	All	High-visibility safety vest, using seat belt and use caution.

36.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW - Highway

Task Description: Winter Sand Cleanup – operating water truck and haul truck

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials such as sand/salt dust	Eyes	Safety glasses with side shields.
Abrasion to hands/contact with poisonous plants	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Cold Temperature	All	Appropriate work clothing for cold temperature conditions
Traffic	All	High-visibility safety vest, using seat belt and use caution.

37.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: Delivery of Office Supplies – materials handling

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Abrasion to hands	Hands	Work gloves, as necessary when handling materials
Impact on feet	Feet	Safety Shoes

38.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: General Building Repair –General repair work, including use of hand/power tool, floor repair and equipment repair/mechanical system service.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials due to use of hand/power tool	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes

39.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: General Building Repair –Painting and painting materials handling

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Paint splashes	Eyes	Safety glasses with side shields or safety goggles
Abrasion to hands	Hands	Work gloves
Falls from 4’ or higher	All	Fall Protection
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Exposure to paints	Lungs	Refer to Respiratory Protection Program for respirator requirements
Exposure to lead during paint scraping	Lungs	Refer to Safety and Health Policies and Guidelines (PaGe-77) for Lead-Based Paint

40.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: General Building Repair –Roof Repair and Replacement

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Fall hazard from heights greater than 4”	All	Fall protection
Flying materials and dust	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Exposure to asbestos roofing materials	Lungs	Refer to the Safety and Health Policies and Guidelines (PaGe-71) for Asbestos

41.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: General Building Repair – Welding, Cutting and Brazing

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
UV light, flying material from welding	Eyes	Welding helmet and safety glasses with side shields Proper shade lenses for type of activity
Flying hot materials	Skin	Proper work clothing with long sleeves
Exposure to air contaminants during welding, cutting and brazing	Lungs	Refer to Respiratory Protection Program for respirator requirements
Abrasion to hands / Hot metal contact	Hands	Welding gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes

42.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: General Building Repair – Wood Working, including using table saw, plainer and radial arm saw.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying wood dust	Eyes	Safety glasses with side shields
Abrasion to hands	Hands	Work gloves when moving materials
Blade cut when using machine	Hands	Machine guarding and use caution
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Equipment noise	Ears	Hearing protection
Wood Dust	Respiratory Tract	Voluntary use of dust mask

43.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: Janitorial Services – Including trash removal, mopping/wax floor, vacuuming and hand cleaning operation

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Splash of cleaning agents during materials handling and cleaning	Eyes	Safety glasses with side shields
Splashes of concentrated materials during mixing	Eyes	Face shield and safety glasses with side shields or goggles
Contact with cleaning chemicals and trash/waste	Hands	Rubber gloves
Wet/slippery surface	All	Slip-resistant safety shoes / boots

44.1.1 Workplace Certification of PPE Hazard Assessment

Department: DPW – Buildings and Grounds

Task Description: Lawn Mowing and Trimming – using riding/push mower, trimming using hand/power tool.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials and dust from mowing	Eyes	Safety glasses with side shields
Flying materials from trimming activities	Eyes	Safety goggles or goggle gear Face shield with safety glasses and side shields
Abrasion to hands	Hands	Work gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from lawn mowing and trimming	Ears	Hearing Protection
Exposure to vehicle traffic in or near parking lots and driveways	All	Use of reflective high visibility vests

Department: Fisheries
Job Task: Cleaning Ponds/Raceways

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Slips on surfaces in ponds or raceways	All	Boot chains or equivalent slip resistant devices on feet/boots
Water	Feet	Boots (waterproof)/Waders
Water/Abrasions	Hands	Gloves (waterproof)
Splashes (water with fish food and fish waste)	Eye	Safety glasses with side shields.

Department: Fisheries
Job Task: Feeding Fish (Broad Casting)

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Dust/Pellets of Food	Eyes	Safety Glasses with Side Shields
Treated/Medicated Food	Hand/Skin	Gloves
Water/Wet Surfaces	Feet	Boots/Work Shoes (Waterproof)

Department: Fisheries
Job Task: Checking Water Supply

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Water	Feet	Boots/Shoes (Waterproof)
Tree Branches	Eye	Safety Glasses with Side Shields
Slips on Muddy/Wet Surfaces	Feet/Ankle	Study/Slip Resistant Boots or Work Shoes

Department: Fisheries
Job Task: Sweeping/Routine Cleaning

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Flying Dust/Debris	Eyes	Safety Glasses with Side Shields
Water/Dilute Cleaning Supplies Splashes	Eyes	Safety Glasses with Side Shields
Concentrated Cleaning Supplies Splashes (during mixing of concentrates)	Eyes	Safety Glasses with Side Shields and Full-Face Shield or Goggles/Goggle Gear
Abrasions	Hand	Gloves (Standard Work Gloves)
Wet Surfaces/Standing Water	Feet	Boots or Waterproof Work Shoes

Department: Fisheries
Job Task: Loading Stocking Truck

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Slips on Surfaces in Ponds or Raceways	All	Boot Chains or Equivalent Slip-Resistant Devices on Feet
Slips on Adjacent Wet Surfaces	All	Study Slip-Resistant Work Shoes or Boots (Waterproof)
Splashes of Water Containing Fish Food and Wastes	Eyes	Safety Glasses with Side Shields
Water/Abrasions	Hands	Waterproof Gloves

Department: Fisheries
Job Task: Salt Application to Ponds

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Dust from Salt	Eyes	Safety Glasses with Side Shields
Splash of Water Containing Fish Food or Fish Waste	Eyes	Safety Glasses with Side Shields
Skin Contact With Salt	Hand	Rubber/Nitrile Gloves

Department: Fisheries
Job Task: Mowing Lawns/Trimming

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Flying Material/Dust/Debris from Mowing	Eyes	Safety Glasses with Side Shields
Flying Material/Dust/Debris from Trimming Activities	Eyes	Goggles or Goggle Gear
Impact or Equipment Rolling over Feet	Feet	Safety Toe Work Shoes
Flying Material/Dust/Debris from Trimming	Skin	Standard Work Clothes Including Long Pants and Long Sleeves
Noise – During Mowing and Trimming with Power Equipment	Ears	Hearing Protection

Department: Fisheries
Job Task: Shoveling/Blowing Snow

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Flying Material/Snow/Debris	Eyes	Safety Glasses with Side Shields
Impact or Equipment Rolling Over Feet	Feet	Safety Toe Footwear
Noise During Blowing Snow Activities	Ears	Hearing Protection
Cold Temperatures	All	Appropriate Work Clothing for Cold Temperature Conditions

Department: Fisheries
Job Task: General Maintenance (Hand/Power Tool Use, Masonry Installation and Repair)

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Flying Dust/Material/Debris	Eyes	Safety Glasses with Side Shields or Dust Goggle Gear
Contact with Wet Cement or Chemicals	Hands	Nitrile Gloves
Impact with Falling Objects on Feet	Feet	Safety Toe Footwear
Overhead Impact with Materials or Falling Objects	Head	Hardhat
Splashes of Maintenance Chemicals	Eyes	Splash Goggles or Splash Goggle Gear
Abrasion to Hands	Hand	Work Gloves
Skin Abrasions	All	Standard Work Clothes Including Long Pants

Department: Fisheries
Job Task: Waterproofing Application

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Skin Contact with Coating Liquid Due to Splashes/Direct Contact	Hands	Nitrile Gloves
Eye Contact with Coating Liquid Due to Splashes/Direct Contact	Eye	Splash Goggles or Splash Goggle Wear
Skin Contact with Coating Liquid Due to Splashes/Direct Contact	All	Work Clothing Covering All Exposed Skin and Rubber Apron During Any Liquid Transfers
Inhalation of Vapors	Respiratory Tract	Adequate Ventilation of Work Area and Respiratory Protection, if necessary

Department: Fisheries
Job Task: Disinfection Activities

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Splashes of Disinfection Chemicals During Mixing and Use	Hand	Nitrile Gloves
Splashes of Disinfection Chemicals During Mixing and Use	Skin	Apron – Nitrile Rubber
Splashes of Disinfection Chemicals During Mixing and Use	Eye	Splash Goggles or Splash Goggle Gear or Safety Glasses and Face Shield
Splashes of Disinfection Chemicals During Mixing and Use	Feet	Chemical Resistant Boots

Department: Fisheries
Job Task: Picking Eggs/Cleaning Trays

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Splashes/Direct Contact with Treated Eggs/Waste	Hand	Nitrile Gloves
Splashes/Direct Contact with Treated Eggs/Waste	Skin	Apron – Nitrile Rubber
Splashes/Direct Contact with Treated Eggs/Waste	Eye	Splash Goggles or Splash Goggle Gear

Department: Fisheries
Job Task: Disease Treatment (Formalin/Chlorocin)

Chemical or Physical Hazard	Effected Part of the Body	Required Personal Protective Equipment
Splashes of Formalin or Disease Treatment Chemicals During Mixing and Use	Hand	Nitrile
Splashes of Formalin or Disease Treatment Chemicals During Mixing and Use	Skin	Apron – Nitrile Rubber
Splashes of Formalin or Disease Treatment Chemicals During Mixing and Use	Eye	Splash Goggles or Splash Goggle Gear During Use; Add Face Shield When Mixing Prior to Use
Splashes of Formalin or Disease Treatment Chemicals During Mixing and Use	Feet	Chemical Resistant Boots
Inhalation of Formalin Vapors	Respiratory Tract	Voluntary Use of Respiratory Protection

45.1.1 Workplace Certification of PPE Hazard Assessment

Department: Horace Nye - Laundry

Task Description: Washing, Sorting and Materials Handling

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Contact with cleaning chemicals and water	Hands	Nitrile gloves
Slippery surface	All	Anti-slip boots / work shoes

46.1.1 Workplace Certification of PPE Hazard Assessment

Department: Horace Nye Home - Maintenance

Task Description: Electrical Repair – installation/repair of electrical connections

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials	Eye	Safety glasses with side shields
Electrical shock	All	Training and use electrical hazard boots
Impact on feet, equipment rolling over feet	Feet	Safety shoes
Abrasion to hands	Hands	Work gloves

47.1.1 Workplace Certification of PPE Hazard Assessment

Department: Horace Nye Home - Maintenance

Task Description: General Building and Equipment Repair – General repair work including use of hand/power tool, daily maintenance checks.

Chemical or Physical Hazard	Effected Body Part	Required Personal Protective Equipment
Flying materials due to use of hand/power tool	Eyes	Safety glasses with side shields
Abrasion to hands, contact with hot equipment during boiler blow-down	Hands	Regular work gloves and insulated gloves
Impact on feet / equipment rolling over feet	Feet	Safety shoes
Noise from loud operations	Ears	Hearing protection