

# Health and Safety Manual Standards & Procedures

# DEVELOPMENT AUTHORITY OF THE NORTH COUNTRY HEALTH & SAFETY MANUAL

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# **SECTION 1.0 GENERAL**

### 1.1 SAFETY POLICY

# A. Statement of Policy

The Development Authority of the North Country (Authority) is committed to maintaining the health and safety of employees. It is the policy of the Authority to take appropriate measures to protect the health and safety of employees in the performance of their assigned work, giving full regard to evolving industry practices and regulatory requirements. The Authority shall follow operating practices that will safeguard employees and the public.

# B. Responsibility and Authority

The overall responsibility for employee safety at all Authority facilities is with the Authority Board of Directors, Executive Director, and the Division Directors.

The Authority will provide appropriate professional advice and counsel to help meet the health and safety policies and responsibilities when applicable.

The Safety Committee, as described in Section 2.1, makes recommendations to assist and guide communication in health and safety policies.

Employees are responsible for following the health and safety program, complying with all rules and regulations. Employees will work in a safe manner while performing all normal and emergency or unusual activities. Employees are expected to use sound judgment during all activities to promote job safety at all times.

# C. Goals and Objectives

The Authority is committed to the goal of maintaining a safe workplace, with the ultimate goal being no injuries at the workplace. The Authority believes all accidents are preventable and, therefore, everyone will make every effort to prevent accidents and comply with all established safety and health laws and regulations.

### 1.2 SAFETY MANUAL INTRODUCTION

# A. Governing Agency

Authority employees are covered by the New York State Department of Labor Public Employee Safety & Health (PESH) rules and regulations. This organization administers regulations set forth by the Occupational Safety & Health Administration (OSHA).

### B. General

This Health and Safety Manual was developed as a general guide to outline policies and procedures as they relate to health and safety at Authority facilities. This manual provides a guideline for expected behavior of all employees in regard to health and safety.

# C. Implementation of the Manual

A copy of the Health and Safety Manual will be available and accessible to each employee. All new employees will be shown how to access this manual in OnBase™ during the new employee orientation process. All employees must complete Form 1- Acceptance & Acknowledgement of Updates Form included in Section 14 indicating they have read the information within the manual. The form will be routed through BambooHR™, the Authority's Human Resources Management System, within one (1) week of receiving the manual to review by Human Resources.

On an annual basis, or as changes occur, this manual will be updated and these changes will be reviewed with all employees. Employees will be required to sign Form 1 for each document revision, indicating that they have been notified of changes to the document.

## **SECTION 2.0 ADMINISTRATION**

# 2.1 SAFETY COMMITTEE

### A. Introduction

The Safety Committee is a working peer group that receives and evaluates safety issues and makes recommendations. The Safety Committee will perform periodic safety reviews of each site. In addition, the Safety Committee will receive complaints and suggestions.

### B. Committee Members

The Committee is made up of a combination of employees from all divisions. It is the intent of the Committee to rotate members to provide additional safety exposure to other employees. The minimum term for a Committee member is one year, and there is no limit to the time a member can remain on the team. Members will be rotated such that no two members will leave the Committee within six (6) months of each other. The Environmental, Health & Safety Engineer (EHSE) will maintain a list of Committee members, length of service and make recommendations to the Executive Director on the length of time each Committee member remains on the team.

# C. Meetings

The Safety Committee will meet periodically throughout the year to review policies, inspections, upcoming compliance items, and discuss accidents or incidents that affect employees. The Committee will also determine applicable safety standards

and apprise management of recommendations to ensure the Authority is operating within the framework of these requirements.

# D. Minutes

A written summary of each meeting will be prepared and made available for employees to review. The minutes will be maintained on the shared file server here: ..\..\Safety Committee.

# 2.2 HEALTH AND SAFETY RECORDS

### A. Introduction

Health and safety records shall be maintained in accordance with applicable regulatory requirements. Medical records, and documents originating from a health care provider shall be maintained by Human Resources to protect employee privacy. Employees may request to review their file at any time.

## B. Procedures

- The Director of Human Resources will coordinate with the appointed health care provider to determine what medical data is to be maintained in the employee's file.
- 2. Access to these files will be restricted and held in confidence by human resources. These records will be kept for the employee's employment period, plus 30 years.
- 3. The following information will be maintained by the EHSE:
  - a. Training Subject
  - b. Employee Name
  - c. Training Date
  - d. Location of Training

### 2.3 HEALTH AND SAFETY TRAINING

#### A. Introduction

Employees must recognize and understand the potential hazards to health and safety associated with the tasks they perform. The objectives of safety training programs are to:

- 1. Increase awareness of potential hazards employees may encounter;
- 2. Ensure employees have the knowledge and skills to perform tasks with minimal risk;
- 3. Educate employees about the purpose and limitations of equipment;
- 4. Provide employees with information to follow in the event of an emergency.

Training records are maintained by the EHSE in BambooHR™, the Authority's Human Resources Management System. This tool may also be used by Division Directors to ensure their staff complete required safety training.

# B. New Employee Orientation

All new employees will receive orientation training that will provide an introduction to the Health and Safety Program, employee rights and responsibilities.

# C. Ongoing Safety Training

Employee Safety Meetings - Employees will attend periodic safety meetings on relevant and required safety issues and training as determined by the Safety Committee members.

Other Safety Training- Periodically employees will be sent to safety training courses relevant to their duties.

### 2.4 INJURY/ACCIDENT REPORT PROCESS

### A. Introduction

All workplace injuries and accidents must be reported immediately. The procedures in this section of the Health and Safety Manual are designed to comply with applicable regulations and ensure worker safety.

## B. Procedures

# 1. Injured Employee

- a. Notify the employee's supervisor immediately.
- b. Employee's Supervisor must immediately notify <a href="mailto:hr@danc.org">hr@danc.org</a>, the Chief Operating Officer, and EHSE.
- c. Obtain necessary first aid or emergency medical treatment
  - Except in emergency situations, the treating health care provider must be authorized by the Workers' Compensation Board. (Information about authorization can be located on the Workers' Compensation Board's (WCB) website.)
  - If medical treatment is sought, a Workers' Compensation C-3
     Form must be completed and submitted to the WCB by Human Resources within 10 days of the accident. Failure to complete this form could result in penalties of up to \$2,500. To facilitate this submittal, employees may need to provide additional information and the Form should be completed within 7 days.

- Employees who seek off-site first aid or medical care following an incident, or have a medical restriction must notify their supervisor and submit documentation related to their fitness for duty. See Section D. Return to Work Policy below.
- d. Complete the Accident/Injury Report Form located in OnBase™ with the employee's immediate supervisor within 24 hours. This form must be completed even if medical treatment is not required at the time of the injury. The workflow in OnBase™ will route a copy of the completed accident report to Human Resources and the Safety Committee.
- 2. Customer, Vendor, Contractor, Visitor, or other non-employee
  - a. Division Directors may choose to assign an Authority employee the responsibility to escort any vendor, customer, contractor or visitors while they are on-site.
    - Escorts are responsible for notifying the site supervisor if a safety incident involving a non-Authority employee occurs.
    - The escort and supervisor should assist in obtaining medical treatment for any injured person.
  - b. Following any reportable incident Form 9 Non-Employee Accident Report Form must be completed by an Authority supervisor on OnBase™. See Section 14.
  - c. The Contractor Safety Policy should be referenced for any incidents involving contractors to ensure compliance with all Authority protocols. See Section 12.

# C. Accident Investigation Policy

The Authority uses the following process of reporting, investigation, analysis and generation of corrective actions to understand and prevent accidents. Participants shall be focused exclusively on promoting workplace safety.

- 1. Accidents must be reported verbally to a supervisor as soon as possible; and supervisors must submit an Accident Report Form on OnBase™ within 24 hours to ensure the accuracy of information. When possible, Authority vehicles shall not be moved following an accident until the investigation is complete. A detailed narrative supported by documents, pictures, and other relevant information should be included before submitting the report for review.
- 2. The EHSE will initiate an investigative interview with the employee following receipt of the Accident Report. The Accident Investigation Committee will include the EHSE and the Director of Human Resources After interviewing the employee(s) involved in an accident, the committee shall identify the accident's root cause, determine potential corrective actions, and submit

their findings to the Safety Committee.

3. The Safety Committee shall review recent incident investigations, consider proposed corrective actions, and make recommendations to management during its regularly scheduled monthly meetings. However, special meetings may be convened to complete an investigation in a timelier manner as required by the severity of an accident.

Recommendations will be based upon:

- a. The events which lead up to the incident
- b. Personal injury
- c. Property damage
- d. Historic patterns of accidents
- e. Employee safety records

The Committee shall conclude each review by determining if the accident was "preventable" or "non-preventable". An immediate finding of "non-preventable accident" may be made if supported by a police report or other contemporaneous factual documentation. Non-preventable accident findings will be made using the National Safety Council's Guide to Determine Accident Preventability. Decisions are based on a simple majority vote of Committee members in attendance.

- 4. The Authority shall notify PESH within:
  - a. 8 hours of an incident which is fatal, or results in hospitalization of three or more employees.
  - b. 24 hours of an incident which causes in-patient hospitalization of an employee, amputation or loss of an eye.
- 5. The Authority will maintain records of occupational injuries and illnesses in accordance with 29 CFR 1904 standards.

# D. Return to Work Policy

Any employee notified of medical or physical limitations which may impact their fitness for duty by a licensed care provider must obtain written documentation, and immediately submit it to Human Resources, and await further instruction before returning to work. Upon receipt, the Authority will initiate a review process to determine if the employee can safely perform all tasks essential to their position with or without accommodations. The Authority shall prioritize returning employees to work safely and expediently, however returning to work without prior authorization may result in disciplinary action.

All limitations and recommendations from a medical care provider must be reported regardless of origin. Human Resources shall send the care provider a written copy of the employee's current job description, including physical requirements, to ensure the accurate determination of work restrictions. The Authority shall make every effort to protect the employee's privacy as the

restrictions are reviewed by Human Resources and the EHSE, recommendations are submitted to Executive Management, and directives are provided to the Division Director and the direct supervisor.

The Authority shall strive to return employees to their regular duties promptly following a temporary medical condition. However, it is necessary to determine if the condition created physical limitations which could make it temporarily unsafe to perform the employee's regular tasks. The Authority shall attempt to find productive alternate work assignments for the duration of the employee's recovery if it is determined to pose an undue risk or hardship.

These alternate assignments are often referred to as "light duty work." The Authority will make reasonable efforts to accommodate employees within the constraints of medical guidance, legal statutes, and facility limitations for up to 12-weeks. Employees offered light duty assignments shall be required to accept, or request leave.

# E. Workers' Compensation

1. By law, the Authority is required to obtain workers' compensation insurance. Because workers' compensation insurance is a substantial cost of doing business, our goal is to prevent and manage accidents.

If the injury is minor, requiring two or fewer treatments by a person rendering first aid, and with lost time of less than one day beyond the end of the working shift on which the accident occurred, the employer may choose to pay for the first aid treatments directly. In this instance, the HR department completes an Employer's Report of Work Related Injury/Illness (Form C-2), but does not send it to the Board or the insurance carrier. Instead, the employer maintains the form in their files for the statutory 18-year period.

2. What benefits are employees entitled to?

When an employee is injured during the course of employment, workers' compensation insurance provides payments to the injured worker or the treating physician(s) for medical treatment, disfigurement, death benefits, and indemnity (lost wages) payments. State law determines the scope and amount of these payments. Payments are denied if 1) the employee tests positive for drugs or alcohol following the accident, 2) a pre-existing injury or non-work related injury was the cause of the accident, or 3) fraud exists.

# 3. Workers' Compensation Fraud

a. Filing false workers' compensation claims is punishable with a substantial fine and imprisonment. Any employee who knows of a co-worker who is abusing the workers' compensation system or has filed false workers' compensation claims should call 1-800-643-LOSS. You will not be asked to identify your name, and the call will not be recorded. This is an anonymous call to our insurance

company.

b. The insurance company has many red flags to identifying workers' compensation fraud, and will investigate any accident they suspect may be fraudulent. They can deny or reduce benefits whenever they suspect a fraudulent claim was filed or an employee is abusing the workers' compensation system.

The following is considered workers' compensation fraud or abuse:

- Faking an accident or injury;
- Exaggerating the seriousness of an accident or injury;
- Taking more time off than is really needed for recovery;
- Attempting to collect benefits for an injury that is not jobrelated:
- Submitting false or exaggerated medical bills for payment;
- Working at another, equally demanding job while collecting workers' compensation benefits;
- Conspiring with, or being persuaded by, another person to do any of the above.
- c. When people abuse workers' compensation benefits, we all pay. The Authority is charged higher insurance premiums, which increase our expenses. The best way to safeguard against fraud is to prevent accidents from happening.
- 4. Authority Workers' Compensation Policy (refer to the Personnel Policy).

# 2.5 SAFETY BULLETINS

The Authority may subscribe to safety-related bulletins and make copies available for employees to review. From time to time, other pertinent safety information will also be made available to employees.

### 2.6 SAFETY COMPLIANCE/SUGGESTION PROCESS

The effectiveness of the Health and Safety Program at Authority facilities is dependent upon individual employees. It is also understood that individual employees may have special insight into the health and safety of a particular task or issue. Suggestions for improving health and safety are always welcome, and may be directed to the employee's immediate supervisor or to Safety Committee members.

The Division Director will receive confidential concerns from employees regarding any health and safety issues. Confidential concerns may also be directed to Human Resources. These concerns will be treated with sensitivity.

### 2.7 MEDICAL SERVICES

- 1. The Authority has a designated health care provider as its primary medical advisor and for consultation on matters of occupational health.
- First-aid supplies will be easily accessible. First-aid kits will consist of
  materials in a container with individual sealed packages for each type of item.
  The contents of first-aid kits will be checked periodically. Each Authority
  operations vehicle (i.e., non-pool/administrative vehicle) and facility will have
  an appropriate First Aid Kit.
- 3. The Division Directors at each site are responsible for obtaining proper equipment for prompt transportation of the injured person to a physician or hospital, or implementing a communication system for contacting necessary ambulance service.

## 2.8 ACCESS CONTROL PLAN

# A. Purpose

This Access Control Plan has been developed for the Warneck Pump Station (WPS) and the Materials Management Facility (MMF) in order to comply with: 1) the New York State Public Employer Workplace Violence Prevention Law that went into effect on March 4, 2007, with final regulations that took effect April 29, 2009; and 2) the Authority's Workplace Violence Prevention Policy by Resolution No. 2009-08-02 on August 20, 2009.

This Access Control Plan describes the methods, procedures, and measures to be used by the Authority to establish physical and personal control measures and prevent loss, damage or compromise of assets and interruption of business activities at the WPS and MMF. This access plan only applies to facilities that are owned by the Authority; as such leased space is not included.

# B. Engineering Controls

# 1. Warneck Pump Station

With the exception of the front parking area, the WPS perimeter is completely enclosed with security fencing, having only one power entry gate. The access gate is kept closed at the facility. Access to the main entrance door and from the rear parking lot at the WPS is controlled through a magnetic lock keypad. Personal codes are specific to employees, allowing for monitoring of access to the facility after business hours. Other doors are locked and the Director of Water Quality Management maintains a list of employees that have been assigned a key to the facility.

The parking lot is well lit from sunset to sunrise. The building is equipped with magnetic door closures, as well as motion detectors in the SCADA room and the operator room which will set off the alarm once the security system is activated. The first employee to arrive and last employee to leave at the end of business hours is responsible for activating the security control panel

located at the main entrance to the facility. Once the system is activated, it will automatically call Affiliated Monitoring Inc., who is sub-contracted by Chimera Integrations, when an alarm is triggered. Affiliated Monitoring Inc. will then dispatch emergency services based on our emergency call protocol and the type of alarm.

Security video cameras monitor access to the facility. These cameras are capable of recording activities at the site and are positioned to monitor critically sensitive areas.

#### 2. MMF

The Operations & Maintenance (O&M) building at the MMF has electronic door locks at all entrance points and alarm panel touch pads inside the main entrance at each facility. The alarm touch pads require personal codes to arm/disarm the security system for the facility. Employees are given access by the Division Director and the Lead Mechanic manages the day-to-day oversight of the security system. The Lead Mechanic will maintain a list of personnel that have been provided with keys or security system codes. IT manages the day-to-day oversight of the door keypads. The personal codes for both the door keypads and security system allow for tracking which employees enter buildings and which employee arms or disarms the security system. Select employees, designated by the Division Director, possess keys to override the electronic key pads in case of malfunction. Chimera Integrations, LLC is automatically notified when an alarm is set off and dispatches the appropriate emergency services.

The facility has a power entry gate to control vehicle access at the entrance to the facility on Route 177. This gate is open during business hours. Personnel working after hours are able to exit the facility by driving up to the gate which will automatically open and close after they have exited the site. The last employee leaving the O&M building activates the security system. The parking lot is well lit between sunset and sunrise.

Security video cameras monitor access to the facility. These cameras are capable of recording activities at the site and are positioned to monitor critically sensitive areas.

### C. Work Practice Controls

Most employees should have only a computer, paperwork, and basic office supplies on their desk. Files containing sensitive information should not be left unattended on desks, especially overnight. Warneck Pump Station and MMF facilities use an internal phone system as a means of secure communication among personnel of the Authority.

Office, shop, or other working areas should not have obstructed exits; any slight obstruction must be removed. Emergency phone numbers for 911 and Verisk 3E are posted near phones.

#### D. Public Access Controls

# 1. WPS

Visitors (all Authority and non-Authority employees) must use the main secure entrance that is opened electronically by the Administrative Specialist, upon the visitor announcing themselves through the intercom placed by the door. There is a reception area with a glass partition separating visitors from the Administrative Specialist. Employees receiving visitors shall notify the Administrative Specialist in advance. The Administrative Specialist will maintain a log of visitors entering the facility which will include the visitor's name, date, time of arrival/departure. Visitors, other than Authority employees, shall be escorted around and out of the facility by Authority personnel, when appropriate.

#### 2. MMF

All visitors must sign in at the O&M upon arrival. Visitors and non-regular vendors shall be escorted around the facility, as appropriate. Authority staff at the O&M shall maintain a log of visitors entering the facility which will include the visitor's name, date, time of arrival and departure.

The shop/maintenance bay areas are not climate controlled and during summer, the overhead doors are kept open during the work day. This creates an unmanned, open area for unauthorized access into the O&M Building. There is an entrance vestibule between the shop and O&M Building. The door from the shop area has been retrofitted with a lock and keyless entry touch pad similar to the main entrance door. This will prevent unauthorized access into the O&M Building from the shop area.

### 2.9 EMERGENCY EVACUATION PLAN

### A. Introduction

The MMF and WPS must have documented procedures that describe the actions employees must take in the event of an emergency situation and/or evacuation.

The Authority Administrative, Information Technology, and Regional Development offices at the State Office Building are owned and operated by a separate agency. Emergency procedures are therefore handled by the Dulles State Office Building Manager.

The Authority's Canton Satellite Office is owned by St. Lawrence-Lewis BOCES. Emergency procedures are therefore handled by BOCES.

The following sections describe the applicable procedures for each facility.

# B. Emergency Procedures

- 1. Escape procedures and evacuation routes
  - a. Employees located at Authority-Owned Facilities

Emergency evacuation plans will be posted in every room at the MMF and WPS. Plans will show a general layout of the building floor plan, including locations of fire extinguishers, pull stations, and exits. As changes occur, these plans will be updated and reposted.

Each employee should become familiar with the evacuation routes that they would use if there were an evacuation from various locations within the facility. Sample Evacuation Maps are included in Section 15 Figures 1 and 2.

Any employee realizing that a serious safety threat exists should proceed in the following manner:

- Initiate an evacuation by activating the nearest fire alarm pull station.
- If no pull station is immediately available then the employee should proceed to exit the facility and notify all employees of the evacuation on his or her way out of the building.
- Employees should close doors behind them when evacuating the building to help isolate the fire and minimize its spread to other areas.
- Upon initiation or responding to an evacuation alarm all employees must immediately leave their work area. Do not go back to your office or try to gather personal belongings before exiting the facility.
- Upon exiting the facility go immediately to the designated gathering point as indicated on the evacuation map for your facility. If applicable, call 911 for emergency response. Do not leave the vicinity of the facility until you have been accounted for and directed to do so by your supervisor or their designee in charge at the site if your supervisor is not present.
- Employees working in the active landfill will call immediate supervisor on their way to the designated gathering point.
   Supervisor will survey the scene for appropriate course of action at that time.
- b. Employees located at the Dulles State Office Building
  - Pull nearest fire alarm upon discovering fire or smoke.

- Don't use fire extinguishers or hoses. Marshall or other trained personnel will do this job if the fire is minor.
- Terminate phone conversations. Do not answer incoming calls. You may call the Building Superintendent's Office only to report information.
- Assist visitors take them with you.
- Put on outer clothing promptly, only if readily accessible.
- Last person out of the room needs to close the door in case of fire. In case of bomb threat, leave doors open.
- Walk to your preassigned assembly point for evacuation using the stairwells only. Be calm, prompt, orderly and quiet so Marshall's instructions may be heard. DO NOT ATTEMPT TO USE ELEVATORS. Do not attempt to reach parking areas.
- When you leave the building, proceed immediately to the assembly area. You are to remain in the assembly areas pending further instructions.
- You should learn the locations of fire alarms and identity of your Marshall and Wardens.
- You should know both stairwells end at the Lobby 1st Floor level.
- Familiarize yourself with the layout of the building.
- Saturdays, Sundays, and holidays there is no one available to assist you in evacuation except the Building Guard.
- If you note anything at all that may endanger the personnel working in the building or visitors, please notify the Building Superintendent's Office as soon as possible at the phone numbers listed.
- In the event of a tornado warning or other severe weather warning, OGS has indicated that there will be a building wide announcement and that staff should move towards the center of the building away from windows and shelter in place until the event passes.
- 2. Accounting for employees during an emergency evacuation

# a. MMF

In the event of an evacuation it is critical to identify any employees, vendors, contractors, or other personnel that could be trapped within the facility as quickly as possible. The first person to arrive at the gathering point should immediately begin taking roll of all employees and other personnel as they exit the facility.

The MMF Customer Service Coordinator shall maintain a copy of the current Emergency Evacuation Procedures, a call list that includes current employee contact information. Additionally, there will be a blank roll-call sheet that shows each employee sorted by division so a roll can be taken as soon as the evacuation begins to assist in accounting for employee's whereabouts and ensuring that all employees working within the MMF have been accounted for during an emergency.

Only trained and qualified personnel can re-enter the facility to perform emergency response measures. If any personnel are unaccounted for, do not attempt to re-enter the facility to locate them unless you are a trained emergency responder. Call 911 and send employees to the front gate to direct emergency responders to the scene.

# b. WPS

In the event of an evacuation of the WPS it is critical to identify any employees, vendors, contractors, or other personnel that could be trapped within the facility as quickly as possible. The WPS includes shared spaces used by other divisions, and Authority employees that work for WQ often perform field work outside the office, as such it is important that procedures are in place to ensure that staff can be accounted for during an evacuation and that it's clear who is in charge should the WQ Division Director not be present during an evacuation.

The Administrative Specialist- Operations assigned to the WPS entrance shall maintain a copy of the current Emergency Evacuation Procedures, a call list that includes current employee contact information, and an Authority-vehicle list that shows the truck numbers and employees that are assigned to each vehicle. Additionally, there will be a blank roll-call sheet that shows each employee sorted by division so a roll can be taken as soon as the evacuation begins to assist in accounting for employee's whereabouts and ensuring that all employees working within the WPS have been accounted for during an emergency.

Only trained and qualified personnel can re-enter the facility to perform emergency response measures. If any personnel are unaccounted for, do not attempt to re-enter the facility to locate them unless you are a trained emergency responder. Call 911 and wait for emergency response personnel to assist.

# 3. The means of reporting fires and other emergencies

All fires and chemical emergencies should be reported by calling 911. The Division Director will decide the necessary steps to address emergency situations that do not directly pose a threat to human health or the environment.

# 4. The job titles of persons responsible for elements of the plan

The order of authority for directing emergency response activities at each facility follows. In the event that there are multiple staff in a single classification, the employee with the most seniority will be in charge. Specific contact information for these employees is available at all sites and through the main office of the Authority.

# a. WPS

1<sup>st</sup> Contact, Director of Water Quality Management 2<sup>nd</sup> Contact, WQ Supervisor for Jefferson County A service area 3<sup>rd</sup> Contact, Administrative Specialist – Operations, assigned to WPS entrance

### b. MMF

1<sup>st</sup> Contact, Director of Materials Management
 2<sup>nd</sup> Contact, Landfill Superintendent
 3<sup>rd</sup> Contact, MMF Assistant Landfill Superintendent

# Safe distances and places of refuge

The safe distance to gather from the facility will depend on the nature and extent of the emergency situation. Employees should proceed to their designated gathering point. If this location does not appear safe then relocate the gathering point to a new area that is a safe distance from the facility. Once 911 responders arrive, they will advise employees of the area boundaries.

# C. Training

- 1. This emergency action plan will be reviewed with employees prior to starting activities at the job site.
- 2. The plan will be reviewed with employees annually and when conditions of the plan change.
- 3. The plan will be reviewed individually whenever a new employee starts work at the job site.

#### 2.10 MEDICAL SURVEILLANCE

### A. Introduction

The Authority provides medical and environmental surveillance for its employees, in accordance with applicable regulatory requirements.

### B. Medical Examinations

# 1. Field Employees

The extent and nature of medical examination will be based on the type of duties being performed by the employee.

Employees that are required to wear a respirator or self-contained breathing apparatus (SCBA) must have an annual medical examination that includes a pulmonary function test in addition to the basic physical with audiogram, vitals, and vision.

Employees that are required to use their commercial driver's license (CDL) in operating Authority owned equipment or vehicles will be given an exam consistent with NYS Department of Transportation (DOT) requirements. This exam will be conducted every other year or by physician's evaluation.

2. All other employees (administrative, office) will not receive routine annual medical examinations unless directed by the Division Director based on their job duties and potential exposure.

# C. Frequency

# 1. Baseline Examinations

Individuals who are permanent Authority employees will receive a baseline examination prior to starting work.

# 2. Periodic Examinations

Routine exams will be conducted in accordance with regulatory requirements as indicated above.

#### Non-Periodic Examinations

An Employee may receive a medical examination when that employee has:

- a. Been injured on the job.
- b. Developed signs or symptoms indicating possible exposure to health hazards.

#### D. Examination Results

All medical testing records are to be submitted directly to Human Resources. These records must state the parameters of the examination and whether or not the individual is able to work with or without restriction. All medical testing records must be sent to HR, which will retain them in the employee's personnel file and will

be available to employees upon request. Results will be shared with the respective Division Director if there is an issue that could impact the employee's ability to safely perform their job functions.

### 2.11 NEW EMPLOYEE SAFETY

- A. Safety training will be provided for all new employees. The employee's immediate supervisor is responsible for ensuring that general safety training is completed prior to performing regular job duties. Safety training requirements are maintained in BambooHR. The EHSE will schedule safety training for new employees within two weeks of start date. The EHSE will verify that all training required for the employee's job description has been completed.
- B. New employees must review the Health and Safety Manual with their supervisor within their first week of employment. Extra time should be spent on accident and hazard reporting procedures, emergency procedures, first aid, personal protective equipment, drug-free workplace policy, and return to work policy.
- C. Specific training needs, based on the employee's job duties, shall be identified at the start of work by the EHSE and a six-month schedule developed to ensure all necessary training is completed within this time frame. Examples of specific training needs for certain employees may include; confined space; lockout tagout training; SCBA training; respiratory fit testing and training.
- D. Supervisors shall encourage and motivate employee involvement in safety, and hold each employee accountable for their safety and the safety of their coworkers.
- E. Supervisors shall explain the workers' compensation system and fraud prevention system to new employees.
- F. Supervisors must review any known workplace hazards with new employees.

### **2.12 AUDITS**

## A. Introduction

In order to continually evaluate the Authority's on-going Health and Safety Program, procedures for auditing health and safety have been established. The results of the audits are used to determine areas that can be targeted for improvement. The objective of auditing is to anticipate and discover hazards and correct them before they lead to accidents, injuries, and job-related illnesses. Results from audits will be reviewed and corrective actions implemented.

### B. Procedures

The Division Directors, responsible for managing Authority-owned facilities, are expected to make periodic job site inspections to verify compliance with the provisions of the Health and Safety Program. Any deficiencies noted during these

inspections will be resolved as soon as practicable. Forms 4 or 5, Health & Safety Inspection Form and the Telecom Safety Inspection Form of Section 14 may be used in job site assessments. Completed Forms will be shared with the Safety Committee.

# C. Follow-Up

. Division Directors, or their designee, shall respond to written inspections noting corrective actions taken to address deficiencies.

### **SECTION 3.0 OPERATIONAL SAFETY PROCEDURES**

### 3.1 GENERAL SAFETY PROCEDURES

All employees are responsible for safety. The following applies to all employees:

- 1. Comply with established safety rules, regulations, procedures, and instructions.
- 2. Promptly report all accidents, hazards, incidents, and near-miss occurrences to your immediate supervisor, regardless of whether or not injury or property damage was involved.
- 3. Do not visit, talk to, or distract another employee who is operating a machine, or who is engaged in a work activity where the possibility of injury exists.
- 4. Do not participate in horseplay, scuffling, pushing, fighting, throwing things, or practical jokes.
- 5. Do not run on Authority premises.
- 6. Use handrails on steps, elevated platforms, scaffolds, or other elevations.
- 7. Assist others and ask for assistance in lifting and carrying heavy or awkward objects.
- 8. Authority employees working at the Materials Management Facility will be required to comply with Sec. 8 of the Solid Waste Operating Permit Rules & Requirements Policy.

#### 3.2 CONFINED SPACE PROCEDURE

### A. Introduction

The purpose of this section is to outline procedures to reduce hazards to employees when entering permit and non-permit required confined spaces. This program is in general accordance with the OSHA permit required confined space

standards (29 CFR 1910.146). It applies to Authority employees involved with confined space entry, as well as all consultants, contractors, and sub-contractors of the Authority.

On an annual basis the Authority will review the confined spaces at all facilities to ensure that no changes have occurred.

# B. Confined Space Definition

In order for an area to be defined as a confined space, three conditions must be satisfied. If a space does not meet all three of these conditions, the area is not classified as a confined space according to OSHA and the requirements below do not apply.

- 1. Large enough and so configured that an employee can bodily enter and perform assigned work; and
- 2. Have limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults and pits are spaces that may have limited means of entry/egress.); and
- 3. Not be designed for continuous employee occupancy.

# C. Non-Permit Confined Space Definition

A non-permit confined space means a confined space (according to the definition above) that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazards capable of causing death or serious physical harm.

In order for a space to be classified as a non-permit confined space, the only hazard posed by the space must be an actual or potentially hazardous atmosphere AND the employer must be able to demonstrate that through forced air ventilation alone the space is safe. A confined space meeting these criteria may be entered without the need for a written permit. Entry to these spaces does not require an attendant or non-entry retrieval equipment. Continuous forced air ventilation and atmospheric monitoring are required.

The alternate entry procedure for entering a space is as follows:

- Survey entry site for hazards such as operating vehicle exhaust, unauthorized personnel, or loose debris that could pose a hazard during entry.
- 2. Apply continuous forced air ventilation.
- 3. Before any employee enters the confined space, the internal atmosphere shall be tested with a calibrated direct reading instrument for the following:

- Oxygen (0<sub>2</sub>)
- Combustible Gases (LEL)
- Carbon Monoxide (CO)
- Hydrogen Sulfide (H<sub>2</sub>S)
- 4. Employee must record the reading on Form 2 Confined Space Entry Permit in Section 14 along with Space Name, Date, Space Location and Name of Entrant. Additional readings will be taken periodically when duration of entry exceeds two hours. No other information is required for entry under attendant procedures.
- D. General Requirements for All Confined Spaces (non-permitted and permitted)
  - 1. Guarding of Entry: When entrance covers are removed, a railing or other temporary barrier shall promptly guard the opening. The barrier must prevent accidental falls and prevent foreign objects from entering the space and causing injury to employees below.
  - 2. Look for any foreign objects that may be present in the area before entering.
  - 3. Notify co-worker prior to entering and after exiting the confined space.
- E. Non-Permit Required Confined Spaces

The table below is a list of Non-Permit Confined spaces that have been assessed to date. Table 1 contains the customer, location including longitude & latitude coordinates, type of space, and permit class. A list of confined space assessments is available for employee review.

# CONFINED SPACE TABLE 1 Non-Permit Required

		Type of Confined	
Customer	Location	Space	<b>Permit Class</b>
	Herrings WWTP		
Town of Wilna	-75.3937, 44.0119	Sewer Effluent Pit	Non-Permit
	Herrings WWTP	Sewer Influent Splitter	
Town of Wilna	-75.3937, 440119	Box	Non-Permit
Town of Wilne	Herrings WWTP	Chlorination Manhala 1	Non Dormit
Town of Wilna	-75.660333, 44.021861	Chlorination Manhole 1	Non-Permit
Village of Castorland	Castorland WWTP -75.508123, 43.893574	Effluent Chamber	Non-Permit
Casionand	-75.506123, 45.695574	Ellident Chambel	NOH-Femili
Village of	Castorland WWTP		
Castorland	-75.507944, 43.894167	Effluent Sampling MH	Non-Permit
Village of	Castorland WWTP	Fla Control Olamba	No. Dec. 7
Castorland	-75.508330, 43.893411	Flow Control Chamber	Non-Permit

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Table 2 contains a list of Non-Permit Required - "Alternate Entry" Confined spaces that have been assessed to date.

# CONFINED SPACE TABLE 2 Non-Permit Required - "Alternate Entry"

Customer	Location	Type of Confined Space	Permit Class
Army Water Line	Booster Pump Station 1 (BPS1) Flow Meter Pit 25115 NYS Rte. 3 -75.870341, 43.980272	Water Meter Pit	Alternate Entry
Army Water Line	BPS1 Pipe Gallery (inside bldg.) -75.870341, 43.980272	Pit	Alternate Entry
Army Water Line	BPS1Sumpt Pump Pit (inside bldg.) -75.870341, 43.980272	Sump Pit	Alternate Entry
Army Water Line	Booster Pump Station 2 (BPS2) Fort Drum Fifth Street West Flow Meter Pit -75.758346, 44.038861	Water Meter Pit	Alternate Entry
Army Water Line	BPS2 Pipe Gallery -75.758346, 44.038861	Pit	Alternate Entry
Army Water Line	BPS2 Sump Pump Pit -75.758346, 44.038861	Pit	Alternate Entry
RWL Town of Brownville	16431 Star School House -76.044159, 44.028784	Water Meter Pit	Alternate Entry
RWL Town of Brownville	Water District 1 17643 Cemetery Rd -76.020050, 44.013634	Water Meter Pit	Alternate Entry
RWL Town of Brownville	25168 NYS Rte 180 -76.045807, 44.029993	Water Meter Pit	Alternate Entry
Town of Rutland	Burnup Road (TPPS1) -75.781970, 44.007411	Water Meter Pit	Alternate Entry
Town of Rutland	Black River Water Treatment Plant NYS Rte. 3 -75.772847, 44.012688	Water Meter Pit	Alternate Entry
RWL Village of Chaumont	Village of Chaumont Water Storage Tank -76.130599, 44.068289	Water Meter Pit	Alternate Entry
RWL Town of Lyme	CR 8 Millens Bay Rd Water District 1 -76.149237, 44.076362	Water Meter Pit	Alternate Entry
RWL Town of Lyme	Water District 1 Old Town Springs Road -76.135744, 44.079364	Water Meter Pit	Alternate Entry
RWL Town of Lyme	Water District 4 10909 CR 8 -76.149741, 44.079079	Water Meter Pit	Alternate Entry
RWL Town of Lyme	Water District 5 Old Town Springs Rd -76.135729, 44.079366	Water Meter Pit	Alternate Entry
RWL Hamlet of Three Mile Bay	Water District 2 29565 Ashland Rd -76.195466, 44.094948	Water Meter Pit	Alternate Entry

Customer	Location	Type of Confined Space	Permit Class
Villages of Carthage/West Carthage	Carthage WPCF Sludge Holding Tank 20 Hewitt Drive -75.627739, 43.982810	Sludge Holding Tank	Alternate Entry
Villages of Carthage/West Carthage	Carthage WPCF Clarifier Tanks (working inside empty tank) 20 Hewitt Drive -75.627735, 43.983023	Clarifier	Alternate Entry
Villages of Carthage/West Carthage	Carthage WPCF Concrete Effluent Contact Tanks 20 Hewitt Drive -75.627576, 43.983381	Tank	Alternate Entry
Villages of Carthage/West Carthage	Carthage WPCF Water Meter Pit 20 Hewitt Drive -75.627147, 43.982844	Water Meter Pit	Alternate Entry
Town of DeKalb	Hermon WWTP CR 17 DeKalb Junction Water Meter/Chlorination Pit -75.234931, 44.470202	Water Meter Pit	Alternate Entry
Town of DeKalb	DeKalb Ridge Road Water Tower -75.268471, 44.502611	Water Meter Pit	Alternate Entry
Village of Dexter	Village of Dexter Water Storage Tank Water Meter -76.0459784, 44.0299479	Water Meter Pit	Alternate Entry
Town of Edwards	Edwards WWTP -75.253070, 44.324906	Clarifier	Alternate Entry
Town of Edwards	Edwards Water Tower -75.251136, 44.323328	Water Valve Manhole	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-1 -75.41225427, 44.61217016	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-2 -75.41114385, 44.619284	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-3 -75.41116274, 44.6211829	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-4 -75.41729921, 44.62600801	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-5 -75.42063044, 44.62808767	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-6 -75.42326036, 44.63049999	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-7 -75.42705913, 44.63449257	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-8 -75.43243585, 44.63985717	Air Release Vault	Alternate Entry

Customer	Location	Type of Confined Space	Permit Class
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-9 -75.43974118, 44.64709235	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-10 -75.44535167, 44.65287154	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-11 -75.44938421, 44.656821	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-12 -75.45154659, 44.65910742	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-13 -75.45587134, 44.66143531	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-14 -75.46270912, 44.66259922	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-15 -75.46849494, 44.66629863	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-16 -75.47287814, 44.67224215	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-17 -75.4751574, 44.67565004	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-18 -75.4787224, 44.68026284	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-19 -75.47860552, 44.6843351	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-20 -75.48024191, 44.68761763	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-21 -75.48222896, 44.68932115	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-22 -75.48369002, 44.69102462	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-23 -75.48614461, 44.69372514	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-24 -75.48725502, 44.69505458	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-25 -75.48789789, 44.69571929	Air Release Vault	Alternate Entry
Heuvelton Force Main	Heuvelton Force Main Rt. 812 CVM MH-26 -75.49041092, 44.69895964	Air Release Vault	Alternate Entry
Town of Wilna	Herrings WWTP -75.3937, 44.0118	Sewer Meter Pit	Alternate Entry

Customer	Location	Type of Confined Space	Permit Class
Town of Wilna	Herrings WWTP -75.660389, 44.021944,	Sewer Recirculation Manhole	Alternate Entry
Village of Malone	Malone WPCF Influent Building Bypass Chamber -74.297984, 44.864199	Tank	Alternate Entry
Village of Malone	Malone WPCF Influent Building -74.297758, 44.864193	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier Splitter Box -74.297694, 44.864199	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier Splitter Box No. 2 -74.297820, 44.864628	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier No. 1 -74.297490, 44.864250	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier No. 2 -74.297506, 44.864316	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier No. 3 -74.297573, 44.864429	Tank	Alternate Entry
Village of Malone	Malone WPCF Primary Clarifier No. 4 -74.297603, 44.864510	Tank	Alternate Entry
Village of Malone	Malone WPCF Rotating Biological Contactor Influent Splitter Box -74.297820, 44.864630	Tank	Alternate Entry
Village of Malone	Malone WPCF Rotating Biological Contactor Effluent Splitter Box -74.297968, 44.865102	Tank	Alternate Entry
Village of Malone	Malone WPCF Thickener -74.297477, 44.864891	Tank	Alternate Entry
Village of Malone	Malone WPCF Secondary Clarifier No. 1 -74.298150, 44.865181	Tank	Alternate Entry
Village of Malone	Malone WPCF Secondary Clarifier No. 2 -74.297817, 44.865206	Tank	Alternate Entry
Village of Malone	Malone WPCF Secondary Clarifier No. 3 -74.298238, 44.865377	Tank	Alternate Entry
Village of Malone	Malone WTP Reservoir -74.217336, 44.755256	Water Storage Tank	Alternate Entry

# F. Permit Required Confined Spaces

1. Permit-required confined space (permit space) means a confined space that has one or more of the following characteristics:

- Contains *or* has a potential to contain a hazardous atmosphere
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section
- Contains any other recognized serious safety or health hazard.

# CONFINED SPACE TABLE 3 Permit Required

Customer	Location	Type of Confined Space	Permit Class
All WQ Customers	Manholes - Authority owned or contract operated sanitary sewer structures greater than 5' feet deep	Manholes	Full Permit Required
Army Water Line	Booster Pump Station 2 Fort Drum Fifth Street West -75.758843, 44.038670	Water Storage Tank	Full Permit Required
Army Sewer Line	Contract 3 Manhole 1 Washington Loop -75.8301175, 44.04925919	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 3 Manhole 2 King Loop -75.83143322, 44.0465925	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 3 Manhole 3 Fitzsimmons Loop -75.83404029, 44.04199124	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 3 Manhole 4 Forsythe Loop -75.83615856, 44.03619443	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 5 Manhole 1 -75.928481, 43.992495	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 5 Manhole 2 -75.924898, 43.996941	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 5 Manhole 3 -75.919662, 43.999750	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 5 Manhole 4 -75.911165, 44.000769	Air Release Manhole	Full Permit Required
Army Sewer Line	Contract 5 Manhole 5 -75.908483, 44.006079	Air Release Manhole	Full Permit Required
Army Sewer Line	Warneck Pump Station 23557 NYS Route 37 Watertown, NY -75.90280, 44.00606	Wetwell	Full Permit Required
Jefferson County	Jeff CO Highway Dept. Teal Drive -75.930403, 43.999468	Sewer Meter Pit	Full Permit Required
Jefferson County	Jeff CO Highway Dept. Teal Drive -75.930403, 43.999468	Sewer Wetwell	Full Permit Required
Materials Management	Manhole No. 1 -75.919817, 43.816848	Manhole	Full Permit Required
Materials Management	Manhole No. 2 -75.919795, 43.817227	Manhole	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Materials Management	Manhole No. 3 -75.919731, 43.817630	Manhole	Full Permit Required
Materials Management	Manhole No. 4 -75.919677, 43.818001	Manhole	Full Permit Required
Materials Management	Manhole No. 5 -75.919613, 43.818381	Manhole	Full Permit Required
Materials Management	Manhole No. 6 -75.919559, 43.818776	Manhole	Full Permit Required
Materials Management	Manhole No. 7 -75.918679, 43.819689	Manhole	Full Permit Required
Materials Management	Manhole No. 8 -75.918465, 43.820432	Manhole	Full Permit Required
Materials Management	Manhole No. 9 -75.918311, 43.821213	Manhole	Full Permit Required
Materials Management	Manhole No. 10 -75.91746, 43.82191	Manhole	Full Permit Required
Materials Management	Manhole No. 11 -75.91669, 43.82262	Manhole	Full Permit Required
Materials Management	Manhole No. 6A -75.919205, 43.819108	Manhole	Full Permit Required
Materials Management	Manhole No. 7A -75.918755, 43.819774	Manhole	Full Permit Required
Materials Management	Manhole No. 8A -75.918561, 43.820223	Manhole	Full Permit Required
Materials Management	Knockout No. 1 -75.919152, 43.820345	Knockout	Full Permit Required
Materials Management	Knockout No. 2 -75.919426, 43.820318	Knockout	Full Permit Required
Materials Management	Knockout No. 3 -75.918088, 43.822342	Knockout	Full Permit Required
Materials Management	Knockout No. 4 -75.917046, 43.823356	Knockout	Full Permit Required
Materials Management	Knockout No. 5 -75.911859, 43.823794	Knockout	Full Permit Required
Materials Management	Main Pump Station 23400 NYS Rte. 177 -75.919081, 43.820409	Wetwell/Drywell	Full Permit Required
Materials Management	Vac Truck Debris Body 23400 NYS Rte. 177	Tank	Full Permit Required
Materials Management	Containment Manhole -75.9230209, 43.8221632	Manhole	Full Permit Required
Materials Management	Containment Catch Basin -75.922962, 43.8223015	Catch Basin	Full Permit Required
Materials Management	Recirculation Tank -75.9222802, 43.8228001	Manhole	Full Permit Required
Materials Management	Leachate Tank No. 1 -75.9225144, 43.8227473	Tank	Full Permit Required
Materials Management	Leachate Tank No. 2 -75.9222985, 43.8226131	Tank	Full Permit Required
Materials Management	Overflow Tank -75.9219768, 43.8228751	Tank	Full Permit Required
Materials Management	Electrical Manhole -75.92161, 43.822230	Manhole	Full Permit Required
Materials Management	Transfer Manhole -75.9217705, 43.822229	Manhole	Full Permit Required
Materials Management	Scale 1	Scale	Full Permit Required

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Customer	Location	Type of Confined Space	Permit Class
	-75.919997, 43.8213569	-	
Materials Management	Scale 2 -75.919851, 43.822108	Scale	Full Permit Required
Materials Management	Maintenance Manhole 1 -75.921772, 43.821358	Manhole	Full Permit Required
Materials Management	Forcemain Cleanout Manhole 12 -75.921987, 43.811985	Manhole	Full Permit Required
Materials Management	Forcemain Cleanout Manhole 13 -75.924702, 43.818721	Manhole	Full Permit Required
Materials Management	Tie In Manhole 1 -75.92404, 43.81788	Manhole	Full Permit Required
Materials Management	12/13 Collection Manhole -75.924962, 43.817947	Manhole	Full Permit Required
Materials Management	Pump Station 3 Wetwell -75.924681, 43.818173	Wetwell	Full Permit Required
Materials Management	Pump Station 3 Containment -75.924689, 43.818104	Containment	Full Permit Required
Materials Management	Leachate Tank No. 3 -75.923898, 43.822731	Tank	Full Permit Required
Materials Management	Spill Basin Leachate Loadout -75.9219907, 43.82289886	Containment	Full Permit Required
Materials Management	Stormwater DI 1 -75.91950226, 43.81890106	Catch Basin	Full Permit Required
Materials Management	Stormwater DI 2 -75.91560364, 43.81819916	Catch Basin	Full Permit Required
Materials Management	Stormwater DI 3 -75.91719818, 43.81819916	Catch Basin	Full Permit Required
Materials Management	Stormwater DI 4 -75.91790009, 43.81829834	Catch Basin	Full Permit Required
Materials Management	Stormwater DI 5 -75.91870117, 43.8185997	Catch Basin	Full Permit Required
Materials Management	Cell #12 Side Risers Primary/Secondary -75.92404, 43.818663	Wetwell	Full Permit Required
Materials Management	Cell #13 Side Risers Primary/Secondary -75.92400, 43.81783	Wetwell	Full Permit Required
RT 3 Sewer Hamlet of Felts Mills	Felts Mills PS-1 (Gleasons FM01) -75.770446, 44.015457	Sewer Wetwell	Full Permit Required
RT 3 Sewer Hamlet of Felts Mills	Felts Mills PS-3 (Back Street FM03) 24444 Boot Jack Hill Rd -75.762827, 44.022372	Sewer Meter Pit	Full Permit Required
RT 3 Sewer Town of Champion	Great Bend PS1 (GB01) 32239 State Rte 3 -75.728947, 44.028546	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Champion	Great Bend PS2 (Bills Feed GB02) 24870 CR 197 -75.717182, 44.029552	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Champion	Great Bend PS3 (Stewart GB03) 25304 Lance Drive -75.714781, 44.035776	Sewer Wetwell	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
RT 3 Sewer Town of Champion	Great Bend PS4 (SH 26 GB04) 31276 NYS RTE. 3	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of	-75.720552, 44.035695 Great Bend PS4 (SH 26 GB04)	0 11 1 5	5 11 5 11 5 11 11
Champion	31276 NYS RTE. 3 -75.720605, 44.035770	Sewer Meter Pit	Full Permit Required
RT 3 Sewer Town of LeRay	Black River PS2A (BR2A) Rex Drive -75.773214, 44.009136	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	Black River SD3 (BR01) 115 E. Dexter ST -75.792764, 44.011151	Sewer Meter Pit	Full Permit Required
RT 3 Sewer Town of LeRay	Black River PS1 (Legion BR01) 115 E. Dexter ST -75.792701, 44.011094	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	Black River PS3 (BR03) Huntington ST -75.806980, 44.005499	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	Black River PS2 (BR02) 28100 Howe ST -75.809289, 44.011277	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	Black River PS6 (BR06) Parkview ST -75.795995, 44.011205	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS1 (Renaissance) 5833 NYS Rte. 3 -75.855230, 43.986305	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS2 (Admirals Walk) 21934 Admirals Walk -75.851594, 43.984648	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS3 (Twin Oaks Dr) 26360 NYS Rte. 3 -75.844367, 43.988932	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS4 (Duffy Rd) 22657 Duffy Rd. -75.839285, 43.994975	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS5 (Cullen Dr) 22511 Cullen Drive -75.826577, 43.993814	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of LeRay	L-PS6 (RT 3) 27618 NYS Rte. 3 -75.817736, 43.998954	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Pamelia	P-PS1 (Marble St) 24949 NYS Rte. 3 -75.872275, 43.978023	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Pamelia	P-PS2 (Overhead Door) 25271 NYS RT. 3 -75.864840, 43.98344	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Rutland	Burnup Road (Taylor Park TPPS1) -75.757188, 44.002997	Sewer Wetwell	Full Permit Required
RT 3 Sewer Town of Rutland	Staplin Road (TPPS2) -75.745928, 44.000219	Sewer Wetwell	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Town of Clifton (Hamlet of Newton Falls)	Newton Falls Wastewater Treatment Plant Rotating Biological Contactor Clarifier Tank -74.99422, 44.21160	Tank	Full Permit Required
Town of Clifton (Hamlet of Newton Falls)	Newton Falls Joy Street Sewer Pumping Station -74.99090, 44.21212	Wetwell	Full Permit Required
Town of DeKalb	Dekalb Wastewater Treatment Plant Sludge Holding Tank -75.282292, 44.505607	Tank	Full Permit Required
Town of DeKalb	Dekalb Wastewater Treatment Plant RBC#1 Sump Pit Between Clarifier & RBC -75.282292, 44.505607	Wetwell	Full Permit Required
Town of DeKalb	Dekalb Wastewater Treatment Plant RBC#2 Sump Pit Between Clarifier & RBC -75.282292, 44.505607	Wetwell	Full Permit Required
Town of Diana	Diana Water Tower 1 -75.315781, 44145306	Tank	Full Permit Required
Town of Diana	Diana Water Tower 2 -75.315608,44145413	Tank	Full Permit Required
Town of Edwards	Edwards Wastewater Treatment Plant 133 New St. Lift Station 75.252967, 44.324769	Sewer Wetwell	Full Permit Required
Town of Edwards	Edwards 133 New St. Fire Hall Lift Station 75.254596, 44.324104	Sewer Wetwell	Full Permit Required
Town of Gouverneur	Gouverneur Gardens Pump Station -75.489762, 44.322413	Sewer Wetwell	Full Permit Required
Town of Gouverneur	Gouverneur Gentry's Pump Station -75.496974, 44.312452	Sewer Wetwell	Full Permit Required
Town of Gouverneur	Gouverneur Johnstown Rd. Pump Station -75.487582, 44.330054	Sewer Wetwell	Full Permit Required
Town of Gouverneur	Gouverneur Nesco Pump Station -75.491752, 44.316250	Sewer Wetwell	Full Permit Required
Town of Gouverneur	Gouverneur Owl Rd. Pump Station -75.482420, 44.325044	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #1 -75.327096, 44.715662	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #2 -75.321484, 44.726813	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #3 75.323056, 44.723370	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #4 -75.321124, 44.722377	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #5 -75.321124, 44.722377	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #6 -75.320157, 44.732323	Sewer Wetwell	Full Permit Required
Town of Lisbon	Lift Station #7 -75.316803, 44.724929	Sewer Wetwell	Full Permit Required
Town of Lisbon	Septic Tank 1 -75.316761, 44.722377	Septic Tank	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Town of Lisbon	Septic Tank 2 -75.316727, 44.724962	Septic Tank	Full Permit Required
Town of Lisbon	Septic Tank 3 -75.316646, 44.725050	Septic Tank	Full Permit Required
Town of Lisbon	Septic Tank 4 -75.316613, 44.725010	Septic Tank	Full Permit Required
Town of Lisbon	Lisbon Wastewater Treatment Plant -75.316581, 44.725075	Equalization Tank When Empty	Full Permit Required
Town of Lisbon	Lisbon Wastewater Treatment Plant -75.316338, 44.725156	Clarifier Tank When Empty	Full Permit Required
Town of Lisbon	Lisbon Wastewater Treatment Plant -75.316274, 44.725188	Dosing Tank When Empty	Full Permit Required
Town of Lisbon	Lisbon Wastewater Treatment Plant -75.316231, 44.724882	Sewer Meter Pit	Full Permit Required
Town of LeRay	Eagle Ridge SD1 (ERPS) -75.861929, 44.043616	Sewer Wetwell	Full Permit Required
Town of LeRay	Farash (FRSH) 28516 Steinhilber Rd -75.815821, 44.076893	Sewer Wetwell	Full Permit Required
Town of LeRay	KC Sewer Pump Station SD1 (KCPS) 75.844218, 44.035467	Sewer Wetwell	Full Permit Required
Town of LeRay	LeRay Crossing (LCPS) 75.829763, 44.056212	Sewer Wetwell	Full Permit Required
Town of LeRay	US Rte. 11 DOFS 75.834035, 44.049996	Sewer Wetwell	Full Permit Required
Town of LeRay	SD1 Wetwell DOF JR -75.834036, 44.050003	Sewer Wetwell	Full Permit Required
Town of LeRay	Wood Creek 25428 US Rte. 11 -75.842863, 44.035310	Sewer Wetwell	Full Permit Required
Town of Louisville	Louisville Water Treatment Plant Clear Well Tank 44.953250, 74.975430	Water Storage Tank	Full Permit Required
Town of Morristown	Morristown Wastewater Treatment Plant Septic Tank 1 -75.643673, 44.588416	Septic Tank	Full Permit Required
Town of Morristown	Morristown WWTP Septic Tank 2 -75.643724, 44.588394	Septic Tank	Full Permit Required
Town of Morristown	Morristown WWTP Septic Tank 3 -75.643626, 44.588357	Septic Tank	Full Permit Required
Town of Morristown	Morristown WWTP Septic Tank 4 -75.643669, 44.588335	Septic Tank	Full Permit Required
Town of Morristown	Morristown WWTP Septic Tank Filter Tank -75.643603, 44.588266	Filter Tank	Full Permit Required
Town of Morristown	Morristown WWTP SBR Feed Pump Tank (raw wastewater holding tank) -75.643526, 44.588279	Tank	Full Permit Required
Town of Morristown	Morristown WWTP Post Equalization Tank -75.643480, 44.588225	Tank	Full Permit Required
Town of Morristown	Morristown WWTP Chlorine Contact Tanks -75.643454, 44.588292	Tank	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Town of Morristown	Morristown WWTP Vault at base of Tower -75.642883, 44.587972	Vault	Full Permit Required
Town of Morristown	Morristown Water Treatment Plant Intake Well Vault -75.654933, 44.584855	Vault	Full Permit Required
Town of Pamelia	Nature Trail (PGT1) -75.879032, 44.012330	Sewer Meter Pit	Full Permit Required
Town of Pamelia	Rte 11 Gardner Tract (PGT2) 22971 US Rte 11 -75.890150,44.010694	Sewer Meter Pit	Full Permit Required
Town of Pamelia	Sewer District No. 9 Bradley Street Pump Station -75.925201, 43.997367	Sewer Wetwell	Full Permit Required
Town of Parishville	Water Treatment Building Clear Well -74.804148, 44.617044	Clear Well	Full Permit Required
Town of Parishville	Valve Vault at the Water Tower -74.804136, 44.616612	Vault	Full Permit Required
Village of Castorland	Castorland WWTP 53000 Rte 410 -75.50834, 43.89319	Sewer Wetwell	Full Permit Required
Village of Castorland	Castorland WWTP -75.5215236, 43.8823076	Lift Station Wet Well	Full Permit Required
Village of Castorland	Castorland WWTP -75.507833, 43.894056	Chlorination MH	Full Permit Required
Town of Wilna	Herrings WWTP -75.660500, 44.022028	Septic Tanks	Full Permit Required
Town of Wilna	Herrings WWTP -75.660444. 44.022028,	Septic Tank Filters	Full Permit Required
Town of Wilna	Herrings WWTP -75.3937, 44.0119	Sewer Influent Wet Well	Full Permit Required
Town of Wilna	Herrings WWTP -75.660444, 44.022000	Effluent Collection Header	Full Permit Required
Town of Wilna	Herrings WWTP -75.3937, 440119	Sewer Dosing Tank Hatch	Full Permit Required
Town of Wilna	Herrings WWTP -75.660417, 44.021944	Sewer Dosing Tank MH	Full Permit Required
Town of Wilna	Herrings WWTP -75.3917, 44.0124	Pump Station 1 Wet Well	Full Permit Required
Town of Wilna	Herrings WWTP -75.3912, 44.0125	Pump Station 2 Wet Well	Full Permit Required
Town of Wilna	Herrings WWTP -75.660306, 44.021833	Chlorination MH 2	Full Permit Required
Villages of Carthage/West Carthage	Carthage School Sample Station -75.6278380, 43.9839647	Manhole	Full Permit Required
Villages of Carthage/West Carthage	Carthage WPCF Sludge Thickener Tank (working off deck/rim) 20 Hewitt Drive -75.3738, 43.5860	Tank	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Villages of Carthage/West Carthage	Carthage WPCF Main Plant Sewer Wetwell 20 Hewitt Drive -75.6277833, 43.9837468	Wetwell	Full Permit Required
Villages of Carthage/West Carthage	Carthage WPCF Long Falls Sewer Lift Station -75.6277833, 43.9837468	Manhole/Wetwell	Full Permit Required
Villages of Carthage/West Carthage	Water Street Pump Station Sewer Pump Pit -75.3639, 43.5833	Wetwell	Full Permit Required
Villages of Carthage/West Carthage	Water Street Pump Station Sewer Racks Pit -75.3639, 43.5832	Manhole	Full Permit Required
Villages of Carthage/West Carthage	River outside the fence Sewer Valve Pit #1 -75.6272720, 43.9834349	Pit	Full Permit Required
Villages of Carthage/West Carthage	Carthage WPCF Scum Collection Pits -75.3742, 43.5900	Pit	Full Permit Required
Villages of Carthage/West Carthage	Carthage WPCF Chlorine Storage Tank -75.6277950, 43.9837290	Tank	Full Permit Required
Village of Heuvelton	Heuvelton WWTP 101 Horseshoe Rd -75.409481, 44.610650	Sewer Wetwell	Full Permit Required
Village of Malone	Malone WPCF Influent Building -74.297812, 44.864178	Grit Chamber	Full Permit Required
Village of Malone	Malone WPCF Influent Building Overflow Vault -74.297874, 44.864316	Tank	Full Permit Required
Village of Malone	Malone WPCF Primary Clarifier Scum Pit -74.297643, 44.864360	Wet well	Full Permit Required
Village of Malone	Malone WPCF Primary Clarifier Sludge Pit -74.297399, 44.864408	Wet well	Full Permit Required
Village of Malone	Malone WPCF Primary Digester Building Sludge Pit -74.2973308, 44.8644702	Wet well	Full Permit Required
Village of Malone	Malone WPCF Influent Pump Station -74.297273, 44.864273	Wet well	Full Permit Required
Village of Malone	Malone WPCF Primary Digester No.1 -74.297273, 44.864273	Tank	Full Permit Required
Village of Malone	Malone WPCF Primary Digester No.2 -74.297174, 44.864575	Tank	Full Permit Required
Village of Malone	Malone WPCF Secondary Clarifier Building Scum Pit -74.297986, 44.865280	Wet well	Full Permit Required
Village of Malone	Malone WPCF Secondary Digester -74.297045, 44.864813	Tank	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Village of Malone	Malone WTP Well Site 1 -74.213542, 44.752485	Water Storage Tank	Full Permit Required
Village of Malone	Malone WTP Well Site 2 -74.211539, 44.745499	Water Storage Tank	Full Permit Required
Village of Malone	Malone WTP Reservoir Vault -74.217724, 44.755776	Water Storage Tank	Full Permit Required
Village of Malone	Duane St. -74.282828, 44.832964	Valve Pit	Full Permit Required
Village of Malone	Duane St. Electrical Pit -74.282943, 44.833058	Valve Pit	Full Permit Required
Village of Malone	Pinnacle Valve Pit 1 -74.276458, 44.837441	Valve Pit	Full Permit Required
Village of Malone	Pinnacle Valve Pit 2 -74.276219, 44.836818	Valve Pit	Full Permit Required
Village of Malone	Pinnacle Valve Pit 3 -74.276219, 44.836818	Valve Pit	Full Permit Required
Village of Malone	Pinnacle Valve Pit 4 -74.276353, 44.836596	Valve Pit	Full Permit Required
Village of Malone	Pinnacle Distribution Building -74.276354, 44.837380	Valve Pit	Full Permit Required
Village of Malone	College St. Pump Station -74.287832, 44.844443	Wet well	Full Permit Required
Village of Sackets Harbor	WWTP Effluent Reuse water vault -76.1280045 43.9454069	Wetwell	Full Permit Required
Village of Sackets Harbor	WWTP Sludge Waste Control vault - 76.1277918 43.9456694	Wetwell	Full Permit Required
Village of Sackets Harbor	WWTP Sludge Holding Tanks 1&2 - 76.1278675 43.945434	Tank	Full Permit Required
Village of Sackets Harbor	WWTP Belt Press Lift Station -76.128002, 43.945411	Wetwell	Full Permit Required
Village of Sackets Harbor	WTP Intake Pigging Valve Vault - 76.1359466 43.9352968	Vault	Full Permit Required
Village of Sackets Harbor	WTP Clearwell - 76.1358205 43.9353586	Tank	Full Permit Required
Village of Sackets Harbor	New Tank -76.115635, 43.935568,	Tank	Full Permit Required
Village of Sackets Harbor	Washington St. Pump Station Wet Well -76.125125, 43.947813	Wetwell	Full Permit Required
Village of Sackets Harbor	Main St. Pump Station Wet Well -76.122417, 43.948433	Wetwell	Full Permit Required
Thousand Island Bridge & Port Authority	Boldt Castle Lift Station -75.922269, 44.345217	Wetwell	Full Permit Required

Customer	Location	Type of Confined Space	Permit Class
Thousand Island Bridge & Port Authority	Yacht House Island Pump Station -75.927325, 44.346386	Wetwell	Full Permit Required
Thousand Island Bridge & Port Authority	Yacht House Island Connection Vault Treatment Tank -75.927382, 44.347145	Vault	Full Permit Required
Thousand Island Bridge & Port Authority	Fern Island WTP Pump Station -75.928591, 44.346848	Wetwell	Full Permit Required
Thousand Island Bridge & Port Authority	Boldt Castle Water Treatment Plant Chlorine Contact Tanks -75.922467, 44.344762	Tank	Full Permit Required

**Note:** Clayton Water/Wastewater and Ogdensburg WWTP confined spaces are listed in their respective Health & Safety manuals.

# 2. Duties and Responsibilities

Employees are responsible for complying with all confined space protocol. Direct supervisors are responsible for ensuring that their employees and contractors have received proper training and that they comply with the requirements of the confined space program during each entry (see specific criteria below). Division Directors are responsible for the overall implementation and maintenance of the Authority's confined space program.

The EHSE, or a qualified designee, will conduct a review of the program, at least annually. This process will utilize canceled entry permits to identify and correct any inadequacies. Figure 3 - Confined Space Decision Flow Chart in Section 15 identifies the process necessary for reviewing each space.

#### a. Entrant Duties

- Entry into a permit required confined space requires that an attendant be present throughout the entire entry. The attendant is assigned to monitor the space and may not enter the space to perform any rescue response until relieved by another attendant.
- Do not enter space until pre-entry checks have been completed and are within acceptable levels on the entry permit (Form 2, Section 14).
- Know the hazards of the confined space (i.e. atmosphere, engulfment, etc.).
- Use equipment properly.
- Maintain communication at all times with the attendant.
- Alert the attendant of any hazards.

- Exit as quickly as possible when ordered by attendant or supervisor, when entrant recognizes any warning sign or symptom, detection of prohibited condition or alarm is activated.
- Complete confined space training prior to entering a permit required confined space.

#### b. Attendant Duties

- The attendant will follow the requirements outlined in the Duties and Responsibilities section, including maintaining communication with the entrant(s) throughout the entire entry and initiating an evacuation of the space if any conditions occur that could impact the safety of the entrant(s).
- Know the hazards of the confined space (i.e. atmosphere, engulfment, etc.).
- Be aware of possible behavioral effects caused by the presence of hazardous substances.
- Maintain an accurate headcount of all entrants.
- Remain outside the confined space until relieved by another properly trained attendant.
- Communicate at all times with the entrant.
- Monitor activities inside and outside the confined space and order evacuation if: a prohibited condition is detected, behavioral effects in the entrant(s) is detected, danger outside confined space is detected, or if attendant feels they can no longer perform their duties as an attendant.
- Summon rescue and emergency services.
- Keep unauthorized persons away from and out of the confined space and inform entrants and the entry supervisor of unauthorized people.
- Perform non-entry rescue duties.
- Perform no duties that interfere with the monitoring and protection of the entrant(s).
- The attendant cannot also be the entrant.

 Complete confined space training prior to acting as an attendance at a permit required confined space.

# c. Confined Space Supervisor Duties

- Know the hazards of confined space (i.e. atmosphere, engulfment, etc.).
- Verify testing was performed, procedures were followed, and equipment was used properly. Confined Space Supervisor must review and sign permit prior to entry.
- Terminate entry.
- Complete the permit forms and complete processing of all permit documentation.
- Cancel permits. Confined space supervisor must review permit to ensure entry was performed in accordance with requirements and sign cancellation of permit.
- Verify rescue means are available and operational.
- Remove unauthorized individuals.
- The Confined Space Supervisor may also act as the attendant, but may not act as the entrant.
- Only designated employees with training in Confined Space Procedures are authorized to act as Confined Space Supervisors. Supervisors must complete onsite confined space training and additional external training specific to confined space safety, as approved by the EHSE, or completion of the 10-Hour OSHA safety training course.
- The following list of job classifications identifies individuals that are authorized as Confined Space Supervisors:
  - Assistant Director of Engineering
  - Assistant Director of Water Quality Management
  - Assistant Landfill Superintendent
  - Director of Engineering
  - Director of Water Quality Management
  - o Environmental Health & Safety Engineer
  - Environmental Specialist
  - Landfill Superintendent
  - o MMF Lead Maintenance Technician
  - Project Engineer
  - Project Engineer II

- Water Quality Coordinator
- Water Quality Senior Operator
- Water Quality Supervisor
- Water Quality Supervisor II

# 3. Labeling/Communication to Employees

All employees must be informed of permit required confined spaces through labeling or other equally effective means. If possible the spaces should be posted with a sign such as, "DANGER – PERMIT REQUIRED CONFINED SPACE, DO NOT ENTER" or other similar language.

4. Atmospheric Testing and Control of Hazards

Before entering a permit required confined space, the internal atmosphere must be tested with a calibrated instrument. During the entry continuous monitoring is required to ensure that a hazardous atmosphere is not present.

Atmospheric testing is required for two distinct purposes:

- The evaluation of the hazards in the permit space, and
- Verification that acceptable entry conditions exist.

Confined space atmosphere shall be tested prior to entry to determine whether dangerous air contamination and/or oxygen deficiencies exist. A direct reading gas monitor shall be used. Minimum parameters to be monitored are oxygen deficiency, lower explosive limits, carbon monoxide, and hydrogen sulfide concentrations. A written record of the pre-entry test results shall be made and kept at the work site for the duration of the job and entered on the appropriate location on the permit entry form. If the entry exceeds 2 hours, additional readings shall be recorded. All affected employees in this work shall be able to review the testing results. All work shall be governed by the most hazardous condition present when work is being performed in adjoining spaces.

- a. Evaluation Testing The atmosphere of a permit required confined space will be analyzed utilizing equipment of sufficient sensitivity and specifically to identify any hazardous atmospheres that may reasonably be expected to exist or arise.
- b. Verification Testing The atmosphere of a permit required confined space will be evaluated and determined to be within an acceptable range before entry is permitted. Results of atmospheric testing are to be recorded on the entry permit.
- c. Duration of the atmospheric testing for each parameter will be made in at least a minimum response time of the test instrument as specified by the manufacturer. All instrument operation will be conducted in strict accordance with the manufacturer's recommendations.

- d. Testing of Stratified Atmospheres is monitoring entries involving descent into atmospheres that may be stratified; the atmosphere will be tested at four (4) foot intervals in the direction of travel. The entrant does not enter into the permit required confined space until said testing is completed and acceptable entry levels are realized.
- e. Control of Atmospheric Hazards is required once a confined space entry is underway. Through surveillance, testing, and ventilation, the risk of impact to the entrant(s) can be minimized.
- f. Surveillance The surrounding areas will be supervised to identify and avoid hazards, such as drifting vapors from surrounding areas.
- g. Space Ventilation If mechanical ventilation is utilized, systems shall be set at 100% outside air. Where it is possible, additional manholes and hatches should be opened to increase circulation. Use portable blowers to augment natural circulation if needed. Perform continuous air quality monitoring. All employees shall reference specific confined space entry procedures for their respective facilities.
- h. Validation of Operation for Direct Reading Portable Gas Monitors

#### 1. Definitions

Bump Test (Function Check) - A qualitative function check where a challenge gas is passed over the sensor(s) at a concentration and exposure time sufficient to activate all alarm indicators to present at least their lower alarm setting. The purpose of this check is to confirm that gas can get to the sensor(s) and that all the alarms present are functional. This is typically dependent on the response time of the sensor(s) or a minimum level of response achieved, such as 80% of gas concentration applied. Note this check is not intended to provide a measure of calibration accuracy.

Calibration Check - A quantitative test utilizing a known traceable concentration of test gas to demonstrate that the sensor(s) and alarms respond to the gas within manufacturer's acceptable limits. This is typically ±10-20% of the test gas concentration applied unless otherwise specified by the manufacturer, internal company policy, or a regulatory agency.

Full calibration – The adjustment of the sensor(s) response to match the desired value compared to a known traceable concentration of test gas. This should be done in accordance with the manufacturer's instructions.

# 2. Recommended Frequency

A bump test (function check) or calibration check of portable gas monitors shall be conducted before each day's use if recommended in accordance with the manufacturer's instructions.

Any portable gas monitor which fails a bump test (function check) or calibration check must be adjusted by means of a full calibration procedure before further use, or removed from service.

A full calibration shall be conducted at regular intervals in accordance with instructions specified by the instrument's manufacturer, internal company policy, or a regulatory agency.

Validation of an instrument's operability shall be conducted if any of the following conditions or events occurs during use:

- i. Chronic exposures to, and use in, extreme environmental conditions, such as high/low temperature and humidity, and high levels of airborne particulates.
- ii. Exposure to high (over range) concentrations of the target gases and vapors.
- iii. Chronic or acute exposure of catalytic hot-bead LEL sensors to poisons and inhibitors. These include volatile silicones, hydride gases, halogenated hydrocarbons, and sulfide gases.
- iv. Chronic or acute exposure of electrochemical toxic gas sensors to solvent vapors and highly corrosive gases.
- v. Harsh storage and operating conditions, such as when a portable gas monitor is dropped onto a hard surface or submerged in liquid. Normal handling/jostling of the monitors can create enough vibration or shock over time to affect electronic components and circuitry.
- vi. Change in custody of the monitor.
- vii. Change in work conditions that might have an adverse effect on sensors.
- viii. Any other conditions that would potentially affect the performance of the monitor.

#### Permit Process

Before entry into a confined space, a confined space permit must be completed and signed by a trained and authorized employee. (Reference Form 2 of Section 14 for a blank permit.) This permit will identify the steps necessary to mitigate any hazards of the space prior to entry. The permit must be posted at the confined space entry point throughout the entry. Once the permit required confined space work is completed, the entry supervisor must cancel the permit. Completed permits must be kept for one year and reviewed annually.

# 6. Rescue and Emergency Procedures

In the event of an incident while an entrant is working in a permit required confined space, the following steps will be followed:

#### a. General Procedures

- Evaluate the situation.
- Notify the entry supervisor & the nearest emergency medical unit, and call 911.
- Do not enter the permit required confined space until another trained attendant can take your position and it is determined that you can enter the space safely. If possible, remove the entrant utilizing the safety line attached to the harness.
- Do not allow untrained EMS personnel to enter the permit required confined space.

## b. MMF Specific Rescue & Emergency Procedures

MMF employees trained and qualified to perform confined space rescue are:

- Environmental Specialist
- Environmental Technician I
- MMF Equipment Operator CDL-A
- MMF Equipment Operator CDL-B
- MMF Lead Maintenance Technician
- MMF Maintenance Technician
- i. Prior to entry, the confined space rescue team will be notified of the space being entered by entrant. If multiple spaces are being entered in same day the entrant will inform the team of such activities. At least one team member must be notified so he or she can communicate information with other members on site. It is the responsibility of the confined space

entry supervisor to ensure the team has been notified.

- ii. Confined space rescue team members and acting supervisor will assemble at the site of entry with all emergency equipment (davit arm, retrieval winch, SCBA and body harness) and make observations of emergency.
- iii. Attendant will make all calls necessary to aid in the emergency situation (911, supervisor, confined space rescue team).
- c. WQ Specific Rescue & Emergency Procedures

WQ job classifications trained and qualified to perform non – entry confined space rescue are:

- WQ Senior Operator
- WQ Operator
- WQ Technician
- i. All facilities operated by Authority employees: At least two team members must be trained and qualified to perform non-entry confined space rescue. It is the responsibility of the confined space entry supervisor to ensure the team includes two members of the confined space rescue team.
- ii. A confined space rescue team member and acting supervisor (may be the same person) will assemble at the site of entry with all emergency equipment (davit arm, retrieval winch, SCBA and body harness) and make observations of emergency.
- iii. Attendant will make all calls necessary to aid in the emergency situation (911, supervisor, confined space rescue team)
- 7. Retrieval Equipment and Personal Protective Equipment

To facilitate non-entry rescue, retrieval systems shall be used whenever an entrant enters a permit required confined space, unless the retrieval equipment would increase the overall risk of the entry and would not contribute to the rescue of the entrant. The determination to not use retrieval equipment must be made by a Confined Space Supervisor.

Appropriate retrieval equipment consists of a full body harness with a retrieval line attached at the center of the entrants back near shoulder level. The harness must be connected to a retrieval line attached to a mechanical device or fixed point outside the space. For any vertical entry over 5' deep, a mechanical device shall be available at the space at the time of entry.

8. Confined Space Procedure for MMF Leachate Manhole Entry

## a. Purpose

This section outlines the specific confined space entry procedures required for entering all leachate manholes at the MMF.

#### Entrance Procedures

Once at the site and prior to entry, the entrant will remove the manhole cover. The manhole will then be surveyed from outside for foreign objects that may impede entry and exit.

Ventilation equipment will be utilized for all leachate monitoring manhole entries.

The entrant will utilize the confined space air monitor to test the atmosphere inside of the manhole. The pre-entry check will be logged on the confined space permit. Air monitoring must continue throughout the entire duration of confined space entry.

Non-entry retrieval equipment is required for all leachate manhole entries unless it has been determined to be detrimental to the safe entry (see section 3.2(F)(9).

After a Completed Permit has been issued by a confined space supervisor AND the Confined Space Rescue Team has been notified of entry, work may proceed.

Care should be taken when entering leachate manholes that are not equipped with a fixed ladder extension outside the hatch. Employees are at greater risk of a fall while entering these spaces and non-entry retrieval equipment should be kept taut to provide fall protection while the employee is descending into these spaces.

After the entrant has reached the floor of the manhole the entrant, with assistance from the attendant as required, will reposition the lanyard to ensure it is free from obstructions. It is the attendant's responsibility to ensure that the non-entry retrieval equipment is positioned such that the entrant could be hoisted out of the space without another person having to enter the space should the entrant lose consciousness or become injured.

The entrant and the attendant will maintain continuous communication. The entrant will exit the manhole immediately if conditions become unsafe or if notified by the attendant that the confined space entry has been terminated.

Once the confined space entry is complete the space will be returned to its normal condition and the completed permit will be returned to the confined space supervisor to close out and file.

# G. Training

All employees who will be involved in confined space entry for any reasons will be properly trained prior to performing this work. This training will be conducted in accordance with CFR 1910.146, to provide adequate information regarding the hazards potentially present in confined spaces, safety precautions and measures available to mitigate these hazards and all emergency equipment and procedures regarding self-rescue, non-entry rescue, and entry rescue. All such training shall be documented and placed in the employee's personnel file or a "Confined Space Safety Training" file. This training shall be updated on a regular basis and whenever the hazards or permit required confined spaces are changed. Specific training will include confined space entry, use of fall protection devices, and use of the air monitoring equipment.

In addition to the standard training provided to confined space entrants and attendants, those individuals that will be expected to perform emergency response and rescue duties during confined space entries must have received current training in the following areas:

- CPR Training (every two years)
- First Aid Training (every two years)
- Annual SCBA Training
- Annual medical approval to wear a respirator (pulmonary function testing)
- Annual Respirator Fit Testing
- Annual Confined Space Rescue Training
- Initial training in the use of fall protection equipment

#### H. Contractors

All contractors or consultants to the Authority that perform work involving permit required confined spaces entry shall comply with the safety requirements contained within this health and safety manual or their own.

The consultants and/or contractors shall complete entry permit forms similar to those contained within this manual. These forms must be submitted to the Division Director or designee after the permit is canceled. The respective employer for each of these consultants or contractors shall be responsible for training and implementing safety programs for their respective employees. The Division Director or designee will be available to provide contractors and consultants with appropriate information on the hazards present in these confined spaces prior to their start of work.

Authority employees working with contractors shall comply with the provisions of the Authority's Contractor Safety Procedures as identified in this manual and in the Authority Contractor Rules & Responsibilities (Form 8).

#### 3.3 LOCKOUT/TAGOUT

#### A. Introduction

The purpose of this section is to outline procedures to eliminate the risks associated with working on or near machinery and pipelines in which "unexpected" start-up of machinery or release of stored energy could cause injury to employees. Further guidance is available in 29 CFR 1910.147.

## B. General Information

- 1. Each employee involved with performing work on any mechanical, electrical, etc., system will be trained in appropriate lockout/tagout procedures.
- 2. Follow procedures to totally isolate the equipment from its energy sources prior to work. Energy sources may include:
  - a. Motor Control Centers
  - b. Instrumentation/Computer Networks
  - c. Hydraulic Systems
  - d. Pneumatic Systems
  - e. Process Fluid Systems
  - f. Vacuum Systems
- 3. Place a lock on each energy isolating device prior to work. The locks must hold the energy-isolating device in a "safe" or "off" position. Attach "Danger Do Not Operate" tags to each lock. On the tag write the name of the employee, and date of attachment.

EACH EMPLOYEE WORKING ON THE MACHINE OR EQUIPMENT MUST PLACE A SEPARATE LOCK AND TAG ON EACH ENERGY ISOLATING DEVICE.

NO EMPLOYEE MAY REMOVE THE LOCK OF ANOTHER EMPLOYEE.

- 4. After verifying that no personnel are exposed, operate the push button or other normal operating controls to verify the equipment will not operate. Return operating controls to "neutral" or "off" position after the test.
- 5. If a lock <u>cannot</u> be utilized, a tag shall be used indicating that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited. Notify your supervisor immediately of any equipment that cannot be locked out. Where a tag cannot be attached directly to the energy isolating device, the tag will be located as close as safely possible to the device in a position immediately obvious to anyone attempting to operate the device. Employees will be trained on the following limitations:

- a. Tags are warning devices and do not provide the physical restraint a lock does.
- b. Tags are not to be removed without authorization of the authorized person responsible for them.
- c. Tags must be legible, understandable, and made of a material that will withstand environmental conditions.
- d. Tags are to be securely attached so that they cannot be inadvertently or accidentally detached during use.

# C. Lockout/Tagout Restrictions

- 1. Isolating devices that are locked and/or tagged will include all those that control an energy source.
- 2. Locks and tags utilized will be able to withstand any adverse conditions in which they may be used. Tags that are located in adverse conditions must not deteriorate making the written message illegible.
- 3. Removal of fuses does **not** satisfy lockout requirements.
- 4. The individual who applied the locks and tags is the only person who will remove said locks and tags.
- 5. No employee will rely on another employee's lock and tag.

# D. Removal of Lock and Tag

- 1. In the event the individual who placed the lock and tag on the equipment is unavailable to remove the lock and tag, the following steps will be followed:
  - a. The supervisor determines if it is safe to restore the energy to the system.
  - b. Determined that the employee who applied the lock and tag is not at the facility.
  - c. Make a reasonable effort to contact said employee.
  - d. Notify employee that the lock and tag was removed upon his/her return to the facility.

# E. Typical Lockout/Tagout Procedure:

Certain equipment that requires a multi-step procedure to isolate energy sources will have a specific written lockout tagout procedure that describes the specific steps that employees will take to properly de-energize. Copies of these SOPs will be linked

to the equipment in the Authority's Computerized Maintenance Management System. In general, all lockout tagout procedures will contain the following information.

# 1. Prepare:

- a. Know the types and amounts of energy that power the machine or equipment to be shut down;
- b. Know the hazards of that energy;
- c. Know how the energy can be controlled;
- d. Locate all switches, valves and energy sources that pertain to this machine or piece of equipment.

# 2. Lockout/Tagout Procedure:

- a. Notify all affected employees that the lockout/tagout system is being utilized:
- Shut down the machine as you normally do;
- c. Operate all energy isolating devices so that the equipment is isolated from its energy sources. Be sure to isolate *all* energy sources-secondary power supplies as well as the main power source;
- d. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic system, and air, gas, steam or water pressure, etc.) must be dissipated or restrained by grounding, repositioning, blocking, bleeding down, etc.;
- e. Apply lockout/tagout devices to the machinery or equipment;
- f. Retrace your steps to make sure all switches, valves and energy sources are isolated and locked out;
- g. Ensure that the equipment is disconnected from the energy source(s). First check that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s).
- h. Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.
- i. The machine or equipment is now locked out.
- 3. Return to Normal Operations:

- a. Make sure the machine or equipment and immediate area around the machine or equipment have been cleared of all nonessential items and that the machine or equipment components are operationally intact.
- b. Check the work area to be sure that all employees have been safely positioned or removed from the area.
- c. Verify that the controls are in neutral.
- d. Replace all guards.
- e. Remove the lockout devices and energize the machine or equipment. The removal of some forms of blocking may require reenergizing the machine before safe removal.
- f. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

# F. Location of Locks and Tags

- 1. Booster Pump Station #1- Locks and tags are located in motor control center room.
- 2. Booster Pump Station #2 Locks and tags are located on the wall in the motor control center.
- 4. WPS Locks and tags are located on the wall between the MCC and Generator Room.
- 5. Limerick Booster Pump Station
- 6. Carthage Wastewater Treatment Plant- Locks and tags are located in the main building, blower building, and sludge building.
- 7. Malone Wastewater Treatment Plant- Locks and tags are located in the entryway in front of the supervisor's office.
- 8. Water Quality vehicles are equipped with locks and tags.
- 9. MMF O&M Building Locks and tags are located in the maintenance shop.

# G. Inspections

The direct supervisors or their designee will conduct periodic inspections of the energy control procedure at least annually to verify that the procedures & requirements of this section are being followed. Records of these inspections will be maintained at the facility.

H. TrainingHealth and Safety ManualDevelopment Authority of the North Country

Each employee will be trained in lockout/tagout procedures prior to conducting the work. Authority will maintain records of this training in accordance with OSHA requirements.

#### I. Coordination with Outside Vendors

This lockout/tagout safety program applies to all Authority employees and outside contractors working on Authority facilities with the exception of those employees who work in the State Office Building. All outside contractors are responsible for ensuring that their employees follow all OSHA requirements and the Authority's Contractor Safety Procedures as identified in this manual and in the Authority Contractor Rules & Responsibilities (Form 8).

#### 3.4 OCCUPATIONAL NOISE EXPOSURE

#### A. Introduction

OSHA, in 29 CFR 1910.95 specifies that whenever employees are exposed to occupational noise levels which are equal to or exceed eight (8) hour time-weighted average of 85 decibels, a continuing, effective hearing conservation program will be administered. Sound level surveys conducted to date indicate that some employees may be exposed to noise levels exceeding this threshold.

# B. Permissible Noise Exposures

Engineering or administrative controls are utilized, where feasible, to reduce sound levels to acceptable levels wherever employees are exposed to sound levels which exceed the permissible noise exposures outlined in Table 4. Where such controls are not feasible, hearing protection devices will be provided and will be required to be worn by employees to reduce sound levels to acceptable levels.

**TABLE 4 - PERMISSIBLE NOISE EXPOSURES** 

Duration per day	Sound level, dBA
(hours)	slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
1/2	110
1/4 or less	115

## C. Designated Areas that Exceed Permissible Exposure Areas

The following areas have been tested and found to be above 85 decibels. As such, employees are required to wear hearing protection whenever they are in these

areas. Periodic testing will be conducted to determine other potential hearing protection required areas.

# **HEARING PROTECTION REQUIRED AREAS**

Location	Required When	Sound level, dBA
BPS1 Generator Room	Generator is running	107 dBA
BPS2 Generator Room	Generator is running	107 dBA
Carthage WPCF Blower Building	Blowers are running	>85 dBA
Carthage WPCF Water Street Pump Station	Generator is running	>85 dBA
Carthage Sludge Dewatering Building – Belt Dewatering Press Room	Sludge Press is running	>85 dBA
DeKalb Generator Room	Generator is running	89 dBA
Edwards WWTP Blower Room	Blower is running	92 dBA
LeRay A-Site Generator Room	Generator is running	96 dBA
LeRay Carey Well Site Generator Room	Generator is running	95 dBA
LeRay Farash Pump Station Generator	Generator is running	95 dBA
LeRay Irving Generator Room	Generator is running	91 dBA
LeRay Wood Creek Pump Station, Generator	Generator is running	96 dBA
Limerick Booster Pump Station Generator	Generator is running	98 dBA
Route 3 Sewer Corridor and LeRay Route 11 Gorman-Rupp Pump Stations with Back-up Engines	Back up motor is running	90 dBA
Malone WPCF Blower Room	Blower is running	>85 dBA
Malone WPCF Secondary Digester Blower Room	Blower is running	>85 dBA
MMF Inch Impact Wrench (1/2" - 1")	In Maintenance Shop	>100 dBA
MMF Bench Grinder	In Maintenance Shop	101 dBA
MMF 4.5" Hand Grinder	In Maintenance Shop	96 dBA
MMF Oil Storage Room	Anytime entering space	92 dBA
MMF Compressor Room	Compressor is running	90 dBA
MMF Emergency Generator Pump Station 1	Generator is running	94 dBA
MMF Emergency Generator Pump Station 3	Generator is running	98 dBA
WPS Generator Room	Generator is running	106 dBA
WPS Pump Gallery	Pumps are running	87 dBA
WPS Shop Area	Air Compressor is	85 dBA
WPS Backup Diesel Pump Room	Pump is running	>85 dBA
Morristown WWTP Blower Room	Blowers are running	101 dBA
Castorland WWTP Generator Room	Generator is running	82 dBA

In addition to the areas listed above, hearing protection is required when employees are working in close proximity to equipment that is suspected to exceed 85 dBA. This includes equipment like impact wrenches, compressors, portable diesel pumps, diesel generators, lawn mowers, heavy equipment, vacuum trucks, etc.

# D. Monitoring

The EHSE will periodically survey work areas to determine background sound Health and Safety Manual Development Authority of the North Country

levels, as well as personal exposure levels to identify duties, tasks, or operations where hearing protectors are to be used. Employees may observe any noise measurements conducted, if they so desire.

# E. Employee Notification

Employees will be notified of the results of the monitoring performed. All employees who may be exposed to noise levels exceeding the eight (8) hour time-weighted average of 85 dB will actively participate in the hearing conservation program. The Division Directors will notify these employees of potential noise levels. This noise exposure will be calculated in accordance with OSHA, Section 1910.95.

# F. Audiometric Testing

The appointed primary health care provider will perform audiometric tests during yearly physicals. A certified technician or other qualified individual will evaluate the audiograms. An audiologist, otolaryngologist, or a physician will review problem audiograms, based on comparison of annual audiogram and baseline audiogram. A baseline audiogram will be conducted during the initial physical or within six (6) months of exposure to noise levels.

Should a problem audiogram be determined to be work-related by a qualified professional the following procedures will be followed:

- 1. Employees not using hearing protection will be fitted with hearing protectors, trained in their use and care, and required to use them.
- 2. Employees already using hearing protection will be refitted and retrained in the use of hearing protectors and provided with hearing protectors with greater attenuation, if necessary.
- 3. The employee will be referred for additional medical examinations and hearing tests as appropriate. The employee will be appropriately informed of the need for additional medical examinations.

All testing and test equipment shall be in accordance with OSHA 1910.95(g)-(h)5.

# G. Hearing Protection

Hearing protection will be provided to all employees exposed to noise levels exceeding the thresholds contained in this section. Due to the short timeframes of work in a specific area, engineering controls may not be feasible, in which case the use of suitable hearing protection must be utilized to protect employees. The methods used to estimate the adequacy of hearing protection attenuation will be conducted in accordance with OSHA, Section 1910.95.

# H. Training Program

Training will be conducted annually. All employees that participate in the Hearing Conservation Program will be informed on:

- 1. The effects of noise on hearing.
- 2. The purpose of hearing protection, the advantages, disadvantages, and attenuation of various types of devices and instructions on selection, fitting, and care.
- 3. The purpose of audiometric testing and an explanation of the test procedure.

# Record Keeping

Authority will maintain a record of all noise level measurements and audiometric testing described in this section. These records will be available to affected employees.

#### 3.5 HEAT ILLNESS PREVENTION PLAN

#### A. Introduction

The purpose of the Authority's Heat Illness Prevention Plan is to ensure employees recognize heat stress hazards and plan appropriately to mitigate those hazards.

# B. Training

To ensure workers are prepared to work safely under hot conditions, all employees and supervisors who may be exposed to heat stress and heat-related illnesses will receive training including:

- 1. Elements of the Authority's Heat-Illness Prevention Plan
- 2. Risk factors for heat stress
- 3. How the body handles heat
- 4. Heat-related illness
- Heat-illness prevention strategies

Supervisor training shall include performing Heat Hazard Assessments, and best management practices, which include accounting for the hottest parts of the day and scheduling work/rest cycles to reduce worker exposures to hazardous conditions.

## C. Monitoring

Supervisors are responsible for monitoring the daily weather and workplace conditions to determine if workers will be exposed to temperatures greater than 70 °F. If the temperatures will exceed 70 °F for more than an hour during the work shift, then a heat hazard assessment needs to be performed.

Employees are responsible for receiving and following guidance from their

supervisors. Employees must always use their best judgement and seek guidance before commencing tasks which may present a greater hazard than previously expected.

#### D. Hazard Assessment

When workplace conditions will exceed 70°F, a heat hazard assessment must be conducted to account for environmental and work factors associated with heat stress and heat-related illnesses. Temperature, humidity, wind speed and solar irradiance are environmental factors that help determine when heat becomes hazardous. Work factors which contribute to heat illness risks include metabolic work rate (physical exertion) and clothing.

Supervisors shall use the <u>OSHA-NIOSH Heat Safety Tool App</u> and the <u>Authority's Heat Exposure Calculator</u> to determine the projected outdoor environmental conditions and Hazard Quotient at each work location every day a hazard assessment is required.

If the Hazard Quotient (HQ) is below 1.0, then no heat stress hazard is anticipated and workers should be able to perform duties without additional control measures. However, when the HQ exceeds 1.0 it is anticipated that workers will be at risk of heat stress and heat-related illnesses. In these cases, multiple heat-illness prevention strategies, or controls, must be implemented to adequately protect workers.

# E. Heat-Illness Prevention Strategies

Heat-illness prevention strategies are broken down into five (5) steps:

- 1. Implement controls aimed at reducing the hazard quotient (HQ).
- 2. Incorporate physiological monitoring (body temperature and/or heart rate) when the risk level is high, very high or severe, to identify heat stress before a more serious condition or illness arises.
- 3. Reduce heat stress conditions with engineering controls.
- 4. Utilize administrative controls to address acclimatization issues and reduce heat stress conditions.
- 5. Provide workers personal protective clothing and equipment to reduce heat stress conditions.

The heat-illness prevention strategies vary slightly for unacclimated workers. Workers who have not worked in a hot environment within the previous week must be placed in an acclimatization program designed to gradually expose them to work in a hot environment.

#### Step 1. Implement Controls to Reduce Hazard Quotient and Risk Level

The first step in the heat-illness prevention strategy is to determine what changes could be made to reduce the hazard quotient (HQ) to a value below 1.0, a low risk level. Examples of effective controls include:

1. Suspend activities during the hottest part of the day and change to work schedule to cooler times of the day. [HIGHLY EFFECTIVE]

- 2. Provide shade or shelter from the sun and eliminate solar irradiance to 0 Watts/m2. [HIGHLY EFFECTIVE]
- 3. When feasible, eliminate use of chemical vapor-barrier coveralls, such as encapsulating suits and whole-body chemical protective suits during hottest parts of day. [HIGHLY EFFECTIVE]
- 4. When feasible, eliminate double clothing layers. [HIGHLY EFFECTIVE]
- 5. When feasible, use mechanical and powered equipment to reduce worker physical exertion, especially heavy physical exertion. This includes the use of forklifts, hoists, earthmoving equipment (backhoes, loaders and excavators), conveyers, portable power tools (e.g., rotary auger in place of hand shoveling), etc. [HIGHLY EFFECTIVE]
- 6. When feasible, change the work-rest schedule to ensure workers receive adequate rest breaks, which will decrease accumulation of body heat. [MODERATELY TO HIGHLY EFFECTIVE]
- 7. If air temperatures are below 95 °F (skin temperature) and air velocities are less than 1-2 mph, then increasing the air velocity at workers using portable fans can be an effective control to increase cooling. Caution: If air temperatures are above 95 °F, then heat will be added to workers by convection, which puts them at risk of heat stress. [MODERATELY EFFECTIVE]
- 8. When feasible, adjust work clothing to lighter, more breathable cotton fabrics or change coveralls to a more breathable material. [SLIGHTLY EFFECTIVE]

# Step 2. When Risk Level is High Incorporate Physiological Monitoring

It is important when the risk level is high, very high or severe, to incorporate physiological monitoring as a measure to identify heat stress before a more serious condition or illness arises. At a minimum, either body temperature or recovery heart rate should be monitored. Additionally, body weight is recommended to ensure workers are properly hydrated.

## **Oral Body Temperature**

Oral temperature is inexpensive, reliable and easy to obtain in the field. It is important to use a reliable and accurate clinical thermometer according to the manufacturer's instructions, and make sure the thermometer is stored in a cool environment. Readings should not be taken be taken within 15-minutes of consuming hot or cool liquids and foods or if the worker is breathing heavily (mouth breathing).

Worker oral temperatures should not exceed 99.5 °F. Increase the frequency and duration of rest breaks, or take other preventative measures, if the oral temperature is above 99.1 °F. Follow the guidelines in the Table 5 below for collecting and interpreting oral temperatures.

TABLE 5 – COLLECTING AND INTERPRETING ORAL TEMPERATURES

Step	Instructions
Schedule times for	During the hottest times of the workday, collect oral

collection of arel	town oratizes at least every bour Hader severe senditions the
collection of oral	temperatures at least every hour. Under severe conditions, the
temperature	cycle should be at least every 30 minutes.
	If worker is not breathing heavily (mouth breathing), then collect
	oral temperature at a scheduled rest break, before consumption
	of water or fluids.
Collect oral temperature	
	If worker is breathing heavily, then have him/her first drink fluids
	and collect temperature at end of rest break, 15-minutes after
	drinking fluids.
Thermometer reading	If thermometer reading is less than 99.1 °F, then resume normal
less than 99.1 °F	work activities and work-rest schedule.
	If thermometer reading is 99.2 to 99.5 °F, then take
Thermometer reading 99.2	precautionary measures to reduce heat stress (e.g., adjust
to 99.5 °F	work/rest schedule or implement additional controls)
	If thermometer reading is above 99.5 °F, then suspend work
	and physical exertion within the hot environment and take
	immediate actions to cool body temperature (e.g., relocate to a
	cool environment with air movement and provide cool fluids).
Thermometer reading	Monitor body temperature and continue cooling efforts until
above 99.5 °F	body temperature returns to a normal temperature below 99 °F.
	Seek medical attention if worker exhibits additional signs of
	heat exhaustion or temperature does not drop or continues to
	elevate at rest.
	If thermometer reading is above 101.2 °F, then seek immediate
	medical attention and take immediate actions to cool his/her
Thermometer reading above 101.2 °F	
	body temperature assuming potential heat stroke conditions
	(e.g., relocate to a cool environment with air movement, remove
	excess clothing, spray his/her body with cool water and fan
	vigorously, and pack ice in armpits and groin area).

# Recovery Heart Rate (Pulse Rate)

The recovery heart rate is a good indicator of heat stress when measured properly. Significant resting heart rate increases can also be used to indicate dehydration. NIOSH recommends a modified Brouha method, which involves taking an initial pulse rate reading at the beginning of a scheduled rest break.

There can be variation among individuals and some may exhibit much lower or higher resting pulse rates. The heart rate recovery evaluation is designed to account for this. However, a qualified medical provider should examine individuals with pre-work pulse rates above 100 bpm when at normal rest. High resting pulse rates could be indicative of an underlying medical condition.

Follow the guidelines in Table 6 for collecting and interpreting pulse rate and heart rate recovery.

TABLE 6 – COLLECTING AND INTERPRETING PULSE RATE & HEART RATE RECOVERY

Step	Instructions
Schedule times for collection of pulse rates	During the hottest times of the workday, collect pulse rates at least every hour. Under severe conditions, the cycle should be at least every 30 minutes. The pulse rate needs to be collected at the start of the rest

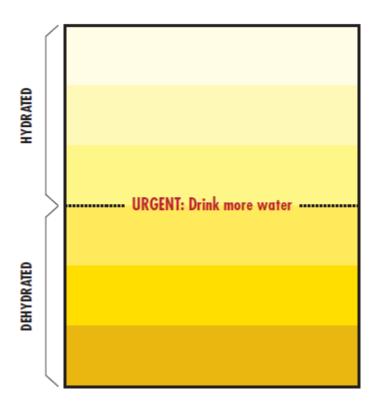
	break, within the first few minutes.
Collect initial pulse	Sit down and rest for two minutes at the start of the
rate (P1)	rest break before collecting the initial pulse rate
If the pulse rate is	Resume normal work activities and work-rest
below 110 bpm	schedule.
If the pulse rate is above 110 bpm	Collect two additional pulse rate measurements at two-minute intervals to evaluate heart rate recovery
If differences between 2-minute intervals is greater than 10 bpm and pulse rate drops below 110 bpm	Resume normal work activities and work-rest schedule.
	Take immediate actions to cool the worker's body temperature: Relocate to cool environment with air movement and provide cools fluids.
If the differences between 2-minute intervals is less than 10 bpm	Monitor pulse rate and/or body temperature and continue cooling efforts until pulse rate drops below 90 bpm or body temperature drops below 99 °F.
	Seek medical attention if worker exhibits additional signs of heat exhaustion or if pulse rate and/or temperature do not drop or continue to elevate at rest.
Re-check pulse rate after 10 minutes	If the resting pulse rate remains above 110 bpm after 10 minutes of rest, then seek immediate medical attention and take immediate actions to cool the worker's body temperature assuming potential heat stroke conditions.
and 10 minutes	Relocate to cool environment with air movement, remove excess clothing, spray the worker's body with cool water and fan vigorously, and pack ice in armpits and groin area.

Monitoring Urine Color – In Addition to Body Temperature or Heart Rate Recovery

Urine color can be a good indicator of potential dehydration, which can lead to heat stress and heat-related illnesses. However, it is not a good indicator of heat stress or illness in itself. The urine color chart below can be used to determine if a worker is properly hydrated.

# **Urine Color Chart**

Are you hydrated?



Step 3. Implement Engineering & Administrative Controls

Implementing effective engineering controls is recommended over administrative controls or protective clothing when risk levels are elevated. The following are examples of effective engineering controls:

- 1. Reduce physical exertion and physical demands of work through use of powered tools and equipment, especially for tasks involving heavy lifting.
- 2. Reduce radiant heat loading from the sun or other sources by placing barriers between the heat source and workers or insulating hot surfaces (furnaces, combustion engines, compressors, hot surfaces, etc.).
- 3. Increase evaporative cooling from skin using fans or air movers when air temperatures are below 95 °F
- 4. Reduce air speed to reduce convective heat transfer from air to skin when air temperatures are above 95 °F.
- 5. If humidity is below 50%, then evaporative coolers and portable fans with water mist systems can be used to effectively cool the air by about 10 to 20 °F.
- 6. Decrease humidity to below 50% to increase evaporative cooling from sweating.

Administrative controls are recommended when effective engineering controls are not feasible, and the risk level is moderate or above. Additionally,

unacclimated workers who have not worked in a hot environment within the previous week must be gradually introduced to working in the heat.

# **Acclimatization Program**

Acclimatization programs gradually increase a worker's exposure to hot environmental working conditions over 7 to 14 days. Allowing the body to adapt to heat improves evaporative cooling and heart rate recovery, thus reducing stress on the heart. Use the following guidelines for acclimating workers to hot working conditions.

- 1. Unacclimated workers: Schedule less than 20% of the work duration in the hot environment on day one and then increase that no more than 20% each day. As an example, for an 8-hour work shift:
  - On day one, schedule no more than 1.6 hours under hot conditions.
  - On day two, schedule no more than 3.2 hours under hot conditions.
  - On day three, schedule no more than 4.8 hours under hot conditions.
  - On day four, schedule no more than 6.4 hours under hot conditions.
  - On day five, schedule no more than 8 hours under hot conditions.
- 2. Acclimated workers: Schedule less than 50% of the work duration in the hot environment on day one, 60% on day two, 80% on day three and 100% on day four. As an example, for an 8-hour work shift:
  - On day one, schedule no more than 4 hours under hot conditions.
  - On day two, schedule no more than 4.8 hours under hot conditions.
  - On day three, schedule no more than 6.4 hours under hot conditions.
  - On day four, schedule no more than 8 hours under hot conditions.

The following are examples of effective administrative controls.

- 1. Schedule work requiring heavy physical exertion during the coolest parts of the day.
- 2. Modify the work-rest schedule to shorten heat exposure periods by including frequent rest breaks. Shorter, more frequent breaks are more effective than longer, less frequent rest breaks.
- 3. Encourage adequate water intake at frequent intervals to prevent dehydration (e.g., one 8-ounce cup of cool water or an electrolyte replacement fluid every 15-20 minutes).
  - a. The supervisor is responsible for making sure clean and sanitary drinking water is provided at no cost to workers.
  - c. Water quantities need to be sufficient and at least 1 quart per worker per hour for the entire shift.
  - d. Locate water containers as close as practicable at all times.
  - e. Encourage workers to frequently drink water and not wait until thirsty.
- 4. Provide a shaded and/or air-conditioned space nearby for rest and water breaks.

- 5. Train workers on the recognition of the signs and symptoms of heat-induced illness and on heat-illness prevention strategies.
- 6. Alert workers to extreme heat events or heat stress conditions and provide a short review of the heat-illness prevention strategies for the day.
- 7. Have worker work in pairs (buddy system) and monitor each other for signs and symptoms of heat stress or illness.
- 8. Instruct workers to avoid caffeine and alcohol before and during working in a hot environment.
- 9. Instruct workers to report illnesses or medical conditions that may put them at risk of heat stress (e.g., diarrhea, fever, infection, etc.).
- 10. Medically screen workers for work in hot environments.

# Implement Personal Protective Clothing and Equipment Controls

If engineering and/or administrative controls are not feasible, then personal protective clothing and equipment should be used to reduce heat stress conditions. The following are examples of effective personal protective clothing and equipment controls.

- 1. Provide clothing designed to keep the body cool, such as air, cooled fluid, or ice cooled conditioned clothing.
- 2. Provide reflective clothing to reduce radiant heat loading from the sun or hot surfaces radiating heat.
- 3. If air temperatures are below 95 °F and worker is protected from radiant heat, then decrease clothing coverage or layers (when feasible) to increase evaporative cooling from skin. Caution: Do not remove clothing designed to protect workers from chemical, mechanical or other hazards without conducting a proper evaluation to address those hazards.
- 4. If air temperatures are above 95 °F, then increase clothing coverage to reduce air speed across skin of workers, which can help reduce convective heat transfer from air to skin.

# F. Emergency Preparedness

It is important that all supervisors and workers know how to recognize the signs and symptoms of heat stress, when to call for emergency medical assistance and what steps they need to take to help the victim of heat stress until emergency services arrive.

First Aid Supplies: Each work site should have at least one person trained to administer first aid. The following first aid supplies for heat-induced illnesses need to be on hand.

- 1. Reliable oral thermometer for checking body temperature.
- 2. Reliable instrument or timer for checking heart rate.
- 3. Cool water or electrolyte replacement fluids.

- 4. Cold packs or ice packs for treatment of heat stroke.
- 5. Spray bottles with water or an available water source for treating heat stroke.

First Aid Providers: The following information must be obtained prior to the beginning of work activities under hot conditions, and readily available to all onsite personnel.

- 1. Site name, street address, and land line phone number (if applicable)
  - a. GPS coordinates are required for sites which are not immediately visible from a named road
- 2. Names, and phone numbers of all first aid trained supervisors or key personnel on site.
- 3. Phone numbers and addresses of local medical emergency services.
- 4. Phone number, address, and driving directions from site to the closest hospital's emergency department entrance.
- 5. Physical address and detailed directions for emergency medical services.

#### 3.6 BLOODBORNE PATHOGENS & POISONOUS PLANTS

#### A. Introduction

The purpose of this section is to outline procedures to minimize the risks associated with bloodborne pathogens while or after working in or near solid and liquid wastes. Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needlesticks and other sharps-related injuries may expose workers to bloodborne pathogens.

## B. Exposure Control Plan

- 1. It has been determined by the Authority that there is a possibility for health effects to its employees when good personal hygiene habits are not practiced during and after handling liquid or solid wastes.
- 2. Engineering and work practice controls are in place to minimize employee exposure.
  - a. Personal protective equipment shall be utilized.
  - Engineering and operational controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.
  - c. Hand-washing sites or hand sanitizer are readily accessible to employees. Employees are required to wash their hands or any exposed area frequently, or as soon as possible after contact with sewage or other wastes.

- d. Employees are also required to wash their hands after handling equipment, solid waste, debris, etc., frequently, or as soon as possible after completion of a task.
- e. Goggles are available and recommended for use by employees working in and around wastewater to reduce exposure.
- f. Gloves are required to minimize the possibility of punctures by sharps and should be worn when handling sludges, screenings or while unclogging equipment.
- g. Employees working in active landfill are required to wear puncture resistant work shoes and gloves to minimize the possibility to exposure by sharps.
- h. Employees with potential exposure to needles or other sharps are required to wear puncture resistant gloves and to use tools or other equipment, where practical, to avoid handling sharps/needles.
- 3. The Authority will provide, at no cost to the employee, appropriate personal protective equipment.
- 4. The Authority makes available, to their employees, the Hepatitis A, B, and tetanus vaccines. These vaccinations are provided to offer employees an increased level of protection against infection in the event that Hepatitis A and B contaminated waste is encountered in the workplace. Employees should consult with their personal physician to determine whether these vaccines are appropriate for them considering their individual health history. If employees elect not to receive the vaccine, they will be required to sign a declination form that will be routed through BamBooHR.

# 3.7 TICK & LYME DISEASE

#### A. Introduction

The purpose of this section is to outline procedures to minimize the risks associated with ticks while or after working in or near tall grass and brush.

- Lyme disease is the most common tick/insect-borne disease in the US, this
  disease can cause skin, joint, heart and nervous system problems that can
  affect people of all ages. Lyme disease is transmitted by the bite of an
  infected blacked legged (or deer) tick or flea with a specialized type of
  bacteria called spirochete.
- Protective measures employees can use when outdoor are wearing light colored clothing, tuck pants into boots or socks, use a repellant containing DEET, walking in the center of trails, and avoid contact with high grass and brush at trail edges.

- 3. The Authority makes available to all employees' tick safety kits which contain a repellant containing 25% DEET, and literature on ticks and Lyme disease.
- 4. The Authority recommends daily self-administered tick checks by staff working in tall grass or brush.
- 5. For more information on Lyme disease and its symptoms, visit the Authority's Intranet or the Center for Disease Control website at: <a href="https://www.cdc.gov/ticks/prevention/index.html">https://www.cdc.gov/ticks/prevention/index.html</a>

#### 3.8 POISONOUS PLANTS

Authority personnel may come in contact with poisonous plants such as poison ivy, giant hogweed, and wild parsnip. It is important for employees to recognize these plants and to avoid contact with the plants. The Authority provides employees with information periodically so employees can recognize the plants, and to properly protect themselves from exposure. If employees suspect contact with a poisonous plant while at work, they should report the location of the suspected plants to their supervisor. The Authority also works proactively to remove poisonous plants from its publicly accessible areas, where practical, to limit exposures.

#### 3.9 FALL PROTECTION

#### A. Introduction

The purpose of this section is to outline procedures to reduce hazards to employees exposed to falls while working from fixed ladders, portable ladders and / or other related equipment. This program is in general accordance with the OSHA fall protection standards. It applies to Authority employees when working 4 feet or more above a lower level, as well as all consultants, contractors, and sub-contractors of the Authority when working more than 6 feet.

#### B. General Information

- 1. The fall protection standard does not apply to employees working on approved scaffolds, portable ladders, and extension ladders.
- 2. The following conventional fall protection systems are most commonly used to protect employees: guardrail systems and personal fall protection system.
- 3. Under certain circumstances, other methods of fall protection may be required, but are based on specific types of hazards and must be approved by the Division Director.
- 4. Fall protection devices do not have to be utilized when the employer can clearly demonstrate that it is not feasible, or creates a greater hazard to use these systems.

# C. System Criteria and Practices

- 1. The Authority will provide to its employees fall protection systems in accordance with the standard.
- 2. All fall protection systems must comply with OSHA standards described in 1926.502. These standards provide very specific requirements for guardrails systems, personal fall arrest systems, lifelines and other harnesses.
- 3. Only qualified individuals can design and approve fall arrest systems.
- Fixed ladders, guardrails and stairs must be inspected on a periodic basis to identify potential hazards such as loose rungs, broken/missing kick plates, damaged grating, etc.
- 5. Personal fall arrest systems must be inspected for damage prior to each use. Only systems purchased from approved vendors are acceptable for use by Authority employees. Any personal fall arrest system that receives a load from a fall, must be immediately removed from service and sent back to the supplier to re-certify the safety of the system.
- Tying off to guardrails and hoists is not permitted. Lines used on scaffolds or similar platforms must be equipped with attachment devices that will lock in both directions. Each worker must be attached to a separate vertical lifeline
- 7. A fall protection system must be in place before employees begin work.

#### D. Fall Protection Plan

- 1. All Authority employees must follow the fall protection standard for work 4' or more above a lower level. Contractors working at Authority-owned or operated facilities must comply with the OSHA construction standard which requires fall protection at heights of 6' or more.
- 2. Fall protection is required when working on or near the following areas:
  - a. On or within 15 feet of the edge of a building roof edge without a fixed fall protection system on the edge of a building. Employees are prohibited from going within 15' of a roof edge without using an approved fall protection system.
  - b. Working on or around a removed grating without a fixed fall protection system.
  - c. Working on or around a catwalk system or platform without a fixed fall protection system.
  - d. While climbing or working from a fixed ladder for access to work around water tanks.

- e. While working from a fixed ladder on the side of a building or structure.
- f. While working from a ladder in a manhole or pit.
- g. While working on a steep slope of which an employee cannot stand or balance himself easily.
- h. While working on or around large equipment.
- i. While working around the edge of excavations with greater than 6 feet vertical drop.
- j. While working around wall openings and/or holes of any kind.

# E. Training

- 1. All workers exposed to fall hazards must be trained to recognize fall hazards and how to minimize the hazard.
- 2. A competent person must perform training.
- 3. Training must include the following information:
  - a. The nature of the fall hazards in the work area.
  - b. The correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems to be used.
  - c. The use and operation of the fall protection system to be used.
  - d. The employee role in the fall protection plan and safety monitoring system when used.
  - e. The requirements of the fall protection standard.

#### 3.10 RESPIRATORY PROTECTION PROGRAM

#### A. Introduction

The purpose of this respiratory program is to establish standard operating procedures to ensure the protection of all employees from respiratory hazards through proper selection and use of respirators. This program applies to all employees who are wearing either required or voluntary use respirators during normal operations or non-routine tasks. Respirator use must be in accordance with the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

## B. Responsibilities

The Authority has designated the Director of Human Resources to oversee the medical surveillance program and the EHSE as the Program Administrator to oversee the respiratory protection program. Duties of the Program Administrator include:

- 1. Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- 2. Selection of respiratory protection options.
- 3. Arranging for and/or conducting employee training.
- 4. Arranging for fit testing.
- 5. Evaluating the program.
- 6. Updating written program as needed.
- 7. Monitoring work areas and operations to identify respiratory hazards.

# C. Supervisor Duties

Division Directors are responsible for ensuring that the Respiratory Protection Program is implemented in their particular areas. In addition to being knowledgeable about the program requirements, Division Directors must also ensure that the program is understood and followed by the employees under their charge. Specific duties of the Division Director include:

- 1. Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation.
- 2. Ensuring the availability of appropriate respirators and accessories.
- 3. Being aware of tasks requiring the use of respiratory protection.
- 4. Enforcing the proper use of respiratory protection when necessary.
- 5. Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- 6. Ensuring that respirators fit well and do not cause discomfort.
- 7. Maintaining records required by the program.
- 8. Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.

# D. Employee Duties

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed and store them in a clean sanitary location.
- 2. Inspect their respirator in accordance with Sec. 3.11(F)(3) of this manual.
- 3. Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
- 4. Inform their supervisor or the Program Administrator of any respiratory hazards that they feel may not be adequately addressed in the workplace and of any other concerns that they have regarding the program.

## E. Respirator Selection

- Respirators are selected on the basis of the hazards to which the employees are exposed and in accordance with OSHA requirements. Only NIOSH certified respirators will be selected and used.
- 2. The Program Administrator will conduct a hazard evaluation for each operation process, or work area where airborne contaminants may be present in routine operations or during an emergency.
- 3. The hazard evaluation will include:
  - a. Identification of the hazardous substances used in the workplace, department or work process;
  - b. Review of work processes to determine where potential exposures to these hazardous substances may occur; and
  - c. Exposure monitoring to quantify potential hazardous exposures.
  - d. The Program Administrator will establish a respiratory hazard assessment table and will revise and update the hazard assessments as needed (i.e., any time work process changes which may potentially affect exposure).
- 5. Respirators for Immediately Dangerous to Life and Health (IDLH) Atmospheres

The employer shall provide a full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes.

IDLH respirators are currently provided for WPS emergency responses due to the potential for a chlorine release and confined space rescue events. SCBAs are available at the MMF for an IDLH emergency.

# 6. Respirators for Atmospheres that are not for IDLH Atmospheres

The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.

Employees responsible for MIG or stick welding, and Plasma Cutting must wear a Powered Air Purifying Respirator (PAPR) 3M Adflo combination welding helmet with a flip up grinding shield. All welding shall be performed with the use of local and general building exhaust ventilation.

# 7. Voluntary Respirator Usage

The Authority will provide respirators to employees for voluntary usage for the following work processes:

- 1. Grinding Metals
- 2. Hay Spreading
- Floor Sweeping
- 4. Cleaning chlorine injectors with muriatic acid
- 5. Outdoor painting with a paint sprayer (spray gun) (i.e. hydrant repainting)

There are two types of respirators approved for voluntary use.

For tasks 1, 2 and 3 above, the respirator provided for voluntary use is a filtering facepiece equivalent to the 3M 8210V, N95 Particulate Respirator Mask.



For tasks 4 and 5, a Scott Model AV2000 or AV-3000 full facepiece respirator with Scott 742 twin series acid gases/P100 or 3M 60926 Multiple Gases/Vapor Cartridge/Filter Combo P100 air-purifying cartridges is approved for voluntary use while cleaning with muriatic acid. On June 12, 2012, Colden Corporation performed industrial hygiene testing at the Town of LeRay's A-Site Water Treatment Plant. The testing was comprised of one WQ operator performing tasks associated with cleaning the water treatment chlorination injector while donning a personal breathing zone sampler. The

purpose of the testing was to determine whether the concentration of hydrochloric acid was above the permissible exposure level. Two tests were completed and the results indicated levels <0.8 ppm of hydrochloric acid, which is less than both the OSHA permissible exposure limit of 5 ppm and the ACGIH TLV of 2 ppm. As such, no respiratory protection is required. Operators choosing to wear a respirator may do so under the voluntary use program.

The EHSE will provide all employees who voluntarily choose to wear a Powered Air Purifying Respirator (PAPR), filtering facepiece or Scott model AV-2000 or AV-3000 full facepiece respirator with Scott 742 Twin Series Acid Gases/P100 or 3M 60926 Multiple Gases/Vapor Cartridge/Filter Combo P100 air-purifying cartridges and a copy of Appendix D of 29 CFR 1910.134. Appendix D details the requirements for voluntary use of respirators by employees. Employees must comply with the procedures for medical evaluation annual fit testing, respirator use, and cleaning, maintenance and storage.

The Program Administrator shall authorize voluntary use of respiratory protective equipment as requested on a case-by-case basis, depending on specific workplace conditions.

Hay spreading is not a regulated activity under OSHA that requires respiratory protection. Employees spreading hay may wear a 3M 8293 Particulate Respirator Mask. Employees in the voluntary respiratory protection program that are utilizing a 3M 8293 Particulate Respirator Mask are not required to complete a fit test or medical evaluation annually. These employees are required to have training on respiratory protection and receive a copy of Appendix D of 29 CFR 1910.134.

## F. Maintenance and Care Procedures

In order to ensure continuing protection from the respirators being used, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not deliver the assumed protection.

## 1. Cleaning & Disinfecting

- a. The Authority provides each user with a respirator that is clean, sanitary, and in good working order. Employees must ensure that respirators are cleaned and disinfected as often as necessary to be maintained in a sanitary condition. Respirators are cleaned and disinfected using the procedures specified in manufacturer's recommendations.
- b. Respirators are cleaned and disinfected:
  - As often as necessary when issued for the exclusive use of one employee;

- Before being worn by different individuals;
- After each use for emergency use respirators; and
- After each use for respirators used for fit testing and training.

# 2. Storage

Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. Respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They are packed and stored in accordance with applicable manufacturer's instructions.

# 3. Respirator Inspection

All respirators will be inspected after each use and at least monthly in accordance with manufacturer's instructions by the employee the respirator is assigned to. Monthly inspections will be logged in the Authority's Computerized Maintenance Management System by the employee. Should any defects be noted, the respirators will be taken to the supervisor. Damaged respirators will be either repaired or replaced.

- b. Respirator inspections shall include the following:
  - A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
  - Check of elastomeric parts for pliability and signs of deterioration.
- c. Checklist inspections will include the following elements:

#### Facepiece:

- Cracks, tears, or holes
- facemask distortion
- Cracked or loose lenses/face shield

#### Head straps:

- breaks or tears
- broken buckles

#### Valves:

- residue or dirt
- Cracks or tears in valve material

#### Filters/Cartridges:

approval designation

- gaskets
- Cracks or dents in housing
- proper cartridge for hazard
- expiration date

### Air Supply Systems:

- breathing air quality/grade
- condition of supply hoses
- hose connections
- settings on regulators and valves

## G. Respirator Filter & Canister Replacement/Change Schedule

An important part of the Respiratory Protection Program includes identifying the useful life of canisters and filters used on air purifying respirators. Each filter and canister shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or if there is no ESLI appropriate for conditions, a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. **Cartridges/Filters shall be changed** based on the most limiting factor below:

- 1. Prior to expiration date
- 2. Manufacturer's recommendations for use and environment
- 3. When requested by employee
- 4. When restriction to air flow has occurred as evidenced by increased effort by user to breathe normally.

#### H. Medical Evaluation

Employees who are required or voluntarily choose to wear respirators must be medically evaluated before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so.

A licensed health care professional must provide the medical evaluation to employees. Medical evaluation procedures are as follows:

- 1. The medical evaluation will be conducted using medical questionnaire provided in Appendix C of 29 CFR 1910.134 Respiratory Protection Standard. The Director of Human Resources or designee will provide a copy of this questionnaire to all employees requiring medical evaluation.
- 2. To the extent feasible, the Authority will assist employees who are unable to read the questionnaire. When this is not possible, the employee will be sent directly to the health care professional for assistance and medical evaluation.

- 3. All affected employees will be given a copy of the medical questionnaire to fill out and deliver the questionnaire to the health care professional. Employees will be permitted to fill out the questionnaire on Authority time.
- 4. Follow up medical exams will be provided to employees as required by the OSHA standard, and/or as deemed necessary by the health care professional.
- 5. All employees will be allowed the opportunity to speak with the health care professional about their medical evaluation if they so request.
- 6. The Authority's Director of HR will provide the health care professional with a copy of this program. For each employee requiring evaluation, the health care professional will be provided with information regarding the employee's work area or job title, proposed respirator type, length of time required to wear the respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.
- 7. After an employee has received clearance to wear a respirator, additional medical evaluations will be provided under any of the following circumstances:
  - a. The employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing;
  - b. The health care professional or supervisor informs the Program Administrator that the employees need to be reevaluated;
  - Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation; and
  - d. A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

NOTE: All examinations and questionnaires are to remain confidential between the employee and the physician. Records of these physicals will be maintained in employee personnel files.

## I. Fit Testing Procedures

The Program Administrator or designee will ensure that a fit-test will be administered using an OSHA-accepted qualitative fit test (QLFT), or quantitative fit test (QNFT) protocol. The OSHA-accepted QLFT and QNFT protocols are contained in Appendix A of the Respiratory Standard (1910.134). The Authority

requires employees to be fit tested at the following times and with the same make, model, style, and size of respirator that they will be using.

- 1. Before being allowed to wear any respirator with a tight-fitting facepiece and at least annually thereafter;
- 2. Whenever a different respirator facepiece (size, style, model, or make) is used.
- 3. Whenever visual observations or a change in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
- 4. Upon employee notification that the fit of the respirator is unacceptable.
- 5. The Authority has established a record of the fit tests administered to employees including:
  - a. The name or identification of the employee tested;
  - b. Type of fit test performed;
  - c. Specific make, model, style, and size of respirator tested;
  - d. Date of test; and
  - e. The pass/fail results

## K. Use of Respirators

- 1. General Use Procedures
  - a. Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or its manufacturer.
  - b. All employees shall conduct user seal checks each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them) specified in Appendix B-1 of the OSHA Respiratory Protection Standard.
  - c. Employees are not permitted to wear tight fitting respirators if they have any condition, such as facial hair, facial scars, or missing dentures that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece to face seal.

d. Voluntary or required respirator use chart listing includes the following:

# **AUTHORITY RESPIRATORY HAZARD ASSESSMENT TABLE**

Department/Task	Contaminant	Exposure Level 8 Hrs TWA [1] (mg/m3)	PEL (mg/m3)	TLV (mg/m3)	Controls		
MMF Maintenance	Copper	0.19	0.1	0.2	Local and general ventilation,		
	Iron Oxide	17	10	5	PAPR 3M Adflo combination		
Welding	Manganese	1.8	5	0.2	welding helmet with grinding shield.		
MMF	Copper	0.017	0.1	0.2	Local and general exhaust		
Maintenance Grinding or wire wheel brushing	Iron Oxide	10.97	10	5	ventilation, <b>voluntary use</b> of 3M 8293 Particulate Respirator Mask with valve.		
MMF Maintenance Plasma Cutting	Copper	0.43	0.1	0.02	Local and general ventilation, PARP 3M Adflo combination		
	Iron Oxide	38	10	5			
	Manganese	0.26	5	0.2	welding helmet with grind shield.		
WQ	Muriatic Acid [2]	<0.8	5	2	Voluntary use of Scott Model AV-2000 or AV-3000 Full Facepiece Respirator w/ Scott 742 acid gases/P100 or 3M 60926 Multiple Gases/Vapor Cartridge/Filter Combo P100 air-purifying cartridges		
WQ	Diatomaceous Earth [3]	TBD [4]	0.05	0.025	Scott Model AV-2000 or AV-3000 Full Facepiece Respirator with N95 filter		
Hay Spreading and Floor Sweeping	Possible bacteriological, dust, allergens and mold	NA	NA	NA	Voluntary use of Filtering facepiece, 3M 8293 Particulate Respirator Mask		
1MMF Leachate Tank Cleaning	Leachate and Leachate Sludge [5]	Unknown	H <sub>2</sub> S = 10 Methane = 1,000	H <sub>2</sub> S = 1 Methane = 1,000	Tanks will be cleaned without entry. If tanks need to be entered for any reason, positive ventilation will be provided and all tank entrants will don a SCBA.		

<sup>[1]</sup> Definition: American Conference of Governmental Industrial Governmental Industrial Hygienists (Time Weighted Average

Health and Safety Manual Development Authority of the North Country

<sup>[2]</sup> No PEL exists for Muriatic Acid; contaminant of concern is Hydrochloric Acid

<sup>[3]</sup> Contaminant of concern in DE is Crystalline Silica (Cristobalite)

<sup>[4]</sup> Concentration assumed to be >10 times PEL and < 50 times PEL. Testing will be performed to verify concentration.

<sup>[5]</sup> Oxygen deficiency, toxic gases such as methane, and hydrogen sulfide are contaminants of concern.

## L. Respirator Malfunction

For any malfunction of a respirator (e.g., such a breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended, and go to a safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator. Respirators that do not meet safety requirements will be destroyed by the supervisor to prevent reuse.

## M. Other Air Quality Requirements

- 1. Ventilation is an important part of any respiratory protection program. Employees should ensure that all exhaust equipment is functional prior to beginning a job that requires the use of respiratory protection. All ventilation systems will be inspected periodically for proper operation by maintenance staff and, tested and approved for use on an annual basis by a qualified vendor or contractor. Any personnel who feel that available protection is inadequate to perform the work task safely must report the situation to their immediate supervisor.
- 2. At the MMF, the following environmental controls will be used to provide air quality control:
  - Powered roof ventilators
  - Powered wall ventilators
  - Powered, local exhaust ventilators
  - Powered, exhaust hose system (for internal combustion engines)
  - Open bay doors (add portable fans as needed)

Typical maintenance shop tasks requiring the <u>minimum</u> of these engineering controls for maintaining air quality:

Hot Work / Grinding / Welding any metal:

Any work involving the use of open flame or spark - producing tools. This can include welding (stick, MIG and MIOG welding of metals), cutting, grinding, and/or burning.

Internal Combustion Engines:

Performing work requiring the operation of equipment that produce(s) carbon monoxide exhaust. All internal combustion equipment will be hooked to the powered, hose ventilation system where possible.

• Creating Dust or airborne particulates:

Any work being performed that Creates nuisance dusts or particulates to the air (floor sweeping, machine cleaning, etc.)

## Creating Inhalation Hazards:

Tasks that generate any inhalation hazard, (i.e. chemical sprays, paints, etc.). Any products being used must be Authority approved.

- 3. The following water quality facilities have fixed continuous atmospheric testing for hydrogen sulfide, oxygen, and combustible gas based on anticipated presence of each. Work within these locations requires employees to wear a personal gas monitor if the fixed system is out of service for any reason:
  - Carthage: Grit Room, Screenings Room, Sludge Building, Thickener
  - Heuvelton Pump Station: Influent Room
  - Malone: Digester Building, Sludge Press Building, Influent Room

# N. Training

The Program Administrator or designee will be responsible to provide respirator training to users or their supervisors on the contents of the Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervising of employees that must wear respirators.

# 1. The training will cover the following topics:

- The Authority's Respiratory Protection Program
- The OSHA Respiratory Protection Standard
- Respiratory hazards encountered and their health effects
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks
- Fit testing
- Emergency use procedures
- Maintenance and storage
- Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (e.g., if they need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training utilizing a hands-on exercise and a written test. Respirator training will be documented by the Program Administrator and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

### O. Program Evaluation

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluation will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and review of records.

Identified problems will be noted and addressed by the Program Administrator. These findings will be reported to management, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementations of those corrections.

# P. Documentation and Recordkeeping

A written copy of this program is part of the Authority's Health and Safety Manual and is available to all employees who wish to review it.

Copies of employee fit test records are maintained in employees' personnel files. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

Medical records for all employees covered under the respirator program will also be maintained in employees' personnel files. The completed medical questionnaire and the physician's documented findings are confidential and will remain at Dulles State Office Building. The Authority will only retain the physician's written recommendation regarding each employee's ability to wear a respirator.

Q. Silica Exposure Control Plan (SECP) for Authority WQ employees working at the Village of Morristown Water Treatment Plant

The purpose of this program is to protect employees from overexposure to respirable crystalline silica and to comply with the applicable construction (29 CFR 1926.1153) and general industry (29 CFR 1910.1053) standards for silica.

Materials such as sand, stone, concrete, asphalt, brick and mortar contain crystalline silica. More specifically, the product that is used in the Diatomaceous Earth (DE) filter system at the Morristown Water Treatment Plant, Celatom Diatomite, may contain up to 50% crystalline silica. When employees handle this material, very fine dust particles (respirable) can become airborne, and if inhaled they can remain trapped deep in the lungs and can cause a number of serious, life-shortening respiratory diseases such as silicosis, lung cancer, chronic obstructive pulmonary disease, as well as kidney diseases.

Our policy is to minimize exposure as much as possible when using the below listed equipment by strictly following the indicated controls and procedures.

The objective is to keep exposures as low as possible. It is important to follow consistent technique when transferring this dry powder into the slurry tank. Take care to cut an opening just large enough to allow effective pouring of the powder into the water. Keep the distance between the bag opening and the water to a minimum and avoid excessive shaking or compressing of the empty bag. If

possible, thoroughly wet the empty bag outside before placing in garbage bag and effectively sealing. As an additional option besides the full-face elastomeric respirators, voluntary use of SAS N95 disposable filtering facepieces is also allowed. Required information from Appendix D of the respirator standard has been provided and posted where the N95s are kept. Additional air monitoring must be done for tasks not listed above to prove that exposure is below PEL of 50 ug/m3.

Dry sweeping or dry brushing of any material, including Celatom Diatomite, that may contain crystalline silica is prohibited. Cleaning will be done by washing, wet sweeping, or HEPA-filtered (High Efficiency Particulate Air filter – at least 99.97 % efficient in removing monodispersed particles of 0.3 micrometers in diameter) vacuuming.

The content of this SECP will be reviewed annually with employees.

TABLE 7 – RESULTS OF PERSONAL AIR SAMPLING DURING ROUTINE CELATOM DIATOMITE SLURRY TANK FILLING OPERATION Morristown WTP, 10/22/21

Equipment/Task	Control Methods/Personal Protective Equipment					
Refilling diatomaceous earth slurry tank after backwash with 50 lb. bag of dry Celatom Diatomite	<ul> <li>Open all available doors/windows to ventilate the room to the extent possible and utilize a consistent technique.</li> <li>Don full-face elastomeric respirator fitted with P100 filter cartridges.</li> <li>Representative personal exposure monitoring for respirable crystalline silica has been conducted during this operation and found to be: Less than the detectable limit (The results are attached to this program)</li> </ul>					
Employee/Respiratory protection worn	Sample duration (minutes)	Contaminant	Measured exposure (mg/m³)	Calculated 8 hr. TWA exposure (mg/m³)	AL (mg/m3)	PEL (mg/m3)
Andrew Bishop/Scott full-face negative pressure air purifying respirator w/ combo (AG/OV/P100) cartridges	15	Respirable crystalline silica	ND		0.025	0.05
		Respirable total dust	ND		NA	5

#### **TABLE NOTES:**

- Sampling conducted by Peter J. Moles, Associate Industrial Hygienist, NYS DOL -PESH
- 2. AL= Action Level as an 8hr TWA; PEL= Permissible Exposure Limit as an 8 hr. TWA; TWA= time weighted average; mg/m³ = milligrams per cubic meter; ND=None detected
- 3. Sampling and Analysis in accordance with modified NIOSH chemical sampling method #7500. Analysis conducted by ALS laboratory group, Cincinnati Ohio.
- 4. Sampling equipment used: 10 mm nylon cyclones; 5 μm Polyvinyl chloride (PVC) filters; Gilian Hi flow air sampling pumps calibrated to 1.7 liters per minute

5. This record must be maintained by the employer in accordance with 29 CFR 1910.1053, 29 CFR 1910.1020 and 12 NYCRR Part 820 (NYS Right-To-Know Law).

#### 3.11 HOT WORK PROGRAM

# A. Purpose

The purpose of a hot work program is to establish a procedure for the control of hazards associated with welding, cutting, or the use of spark producing tools for the prevention of fire or subsequent injury to personnel.

## B. Responsibility

It is the responsibility of all employees, supervisors, and Division Directors who will either perform or oversee hot work operations to adhere to the requirements of this program. It will be the responsibility of the direct supervisor to evaluate all jobs prior to the work beginning to assess hazards and necessary controls required before any work will begin. This assessment will include evaluating the respiratory hazards of the materials used, as well as the potential for fire.

## C. Scope

 This procedure applies to any hot work performed by any Authority employee or contractor. This procedure does not apply to hot work performed in designated safe work areas.

## 2. Definitions:

**Hot Work** - Work involving the use of open flame or spark-producing tools such as, but not limited to, welding, cutting, burning, grinding, and heat related producing jobs that could ignite combustibles.

<u>Safe Work Areas</u> - These areas have been designated/designed specifically for cutting, welding, and grinding activities. The Division Director is responsible for designating all safe work areas once he/she is assured of proper protection against combustibles.

The following areas have been designated as "hot work areas" and do not require a permit to conduct hot work.

- Maintenance Shop at the MMF
- Maintenance Shop at the WPS
- Maintenance Garage at Carthage WPCF

### D. Procedures

All hot work outside a designated safe work area requires that a hot work permit be completed prior to the start of work. Components of a hot work program include the following:

- 1. Due to the potentially poisonous vapors that are generated from hot work on galvanized metal, this type of hot work is prohibited without the express written consent from the Division Director.
- A visual inspection must be performed prior to initiating any hot work outside of a designated hot work area. This site will be evaluated for potential fire and safety hazards by the supervisor prior to starting the job. The Supervisor will carefully review activities to determine if a less hazardous mechanical method, such as cutting with a hack saw, can be used instead of more heat and spark producing methods.
- 3. Where practical, all flammable and combustible materials shall be relocated at least 35 feet from the work area. Where relocation is impractical, combustibles and flammables shall be protected with flameproof covering or otherwise shielded with metal or flameproof curtains.
- 4. The person conducting the hot work will have a fire extinguisher within sight during all hot work operations.
- 5. Where potential for flammable or combustible vapors or gases might be present in the area, these concentrations must be determined before work begins. The supervisor will determine the concentration of the vapors or gases and record this measurement.
- 6. Hot works **shall not** be permitted if the concentration reaches 10% of the lower explosive limit (LEL). If combustibles gas meter indicates any concentration of flammable vapor, the work shall not be authorized until the supervisor:
  - Understands the source of the flammable-combustible vapors.
  - Can assure that concentration will not increase to a dangerous level while work is underway.
- 7. When performing hot work overhead, if combustibles could inadvertently be moved into the area, or people enter the area, the area below must be roped off and posted.
- 8. Where possible, non-combustible barriers should be placed around and under hot works area to confine sparks.
- 9. Open drains which lead to underground drainage systems which could contain flammable or combustible vapors, should:
  - Have testing for the presence of any flammable or combustible vapors done before starting work;
  - Have drains covered with fire blanket or similar protection to prevent access to sparks even if the atmosphere is safe; and/or
  - If determined to contain flammable or combustible vapors, the system must be purged with nitrogen to below 5% (LEL).

- 10. In areas immediately hazardous to life, hose masks, hose masks with blowers, or a self-contained breathing apparatus shall be used in addition to suitable rescue equipment for confined space entry situations. Only trained and authorized employees may use respiratory equipment.
- 11. Employees are required to wear the proper personal protective equipment, such as overalls, safety goggles, face shield, welding hood, welding jacket, etc., as demanded by the type of work completed and required by the immediate supervisor.
- 12. A welding screen must be used to prevent flash turn to other employees.

### E. Contractors

Contractors are required to follow site hot work procedures as outlined. The Division Director is responsible for ensuring that all procedures are followed.

## F. Record Keeping

Form 3 Hot Work Permits in Section 14 must be completed and returned to the Division Directors for review and filing. Completed permits will be reviewed on a periodic basis to ensure accuracy and thoroughness. Hot work permits will be retained on file for one year from the permit completion date.

#### 3.12 WORKPLACE VIOLENCE PREVENTION PROGRAM

### A. Policy Statement:

The Authority is committed to maintaining a safe and secure work environment for all employees, visitors, and quests.

The primary objective of this policy is to promote the safety and well-being of everyone in our workplace. All incidents of violence or threatening behavior will be addressed immediately upon notification.

Every effort will be made to eliminate hazards whenever feasible when determining control measures. The Authority has designated its Safety Committee to assess the effectiveness of the Workplace Violence Prevention Program, and to ensure adequate employee involvement.

The term "workplace violence" is defined as any physical assault or acts of aggressive behavior occurring where a public employee performs any work-related duty in the course of his or her employment including but not limited to:

- Any verbal or physical attempt or threat to inflict physical injury upon an employee;
- ii. Any intentional display of force which gives an employee reason to fear or

expect bodily harm;

- iii. Intentional, wrongful, and nonconsensual physical contact with a person that causes injury;
- iv. Stalking an employee to create fear of harm for an employee's physical safety and health.

## B. Incident Reporting

All Authority employees are responsible for notifying their Division Director of any violent incidents or threatening behavior, including threats they have witnessed, received, or heard about from others. Employees who experience or witness violent behavior must report it to their Division Director immediately and complete the Authority's standard Incident Reporting Form as soon as practicable.

In cases of domestic violence, if any employee has a court order requiring the abuser to stay away from the workplace, the employee should inform their Division Director to receive assistance as needed.

Copies of all Incident Reports will be retained as permanent Authority records under the custody of the Authority's Director of Human Resources.

# C. Division Director's Responsibility

- Inform employees of their responsibility to behave in a manner consistent with this program, and insist that any violations be brought to their attention immediately.
- Document incidents and complaints of this nature and report them immediately to the Director of Human Resources and Executive Director.
- Refer reports of immediate or serious threats of violence to the local criminal justice authorities for any action the criminal justice authorities deem appropriate.
- Ensure corrective actions are taken with employees who behave in a hostile or threatening manner consistent with the Authority Personnel Policy.
- Facilitate in the enforcement of all known court orders, particularly those in which abusers have been ordered to stay away from the workplace.
- Assist the employee in enforcement of an existing, known order, including gathering and providing evidence related to whether a violation of an order has occurred.
- Facilitate referrals to Employee Assistance Program or other relevant services.

- Ensure that injured employees receive prompt and appropriate medical care, including transportation to medical facilities.
- Address the need for appropriate treatment of victimized employees, acknowledging that psychological trauma may accompany physical injuries.
- Conduct annual risk assessments for locations where employees are stationed, in conjunction with current PESH administrative plan of employer locations.

#### D. Conduct A Risk Evaluation and Determine Risk Factors

The Authority is responsible for assessing employees' work environments for actual or potential risk factors annually. This includes analyzing risk evaluation data to identify suitable control measures.

- Examine any records of workplace violence incidents in the past year
- Identify patterns in the type and cause of injuries
- Review records to include, but not limited to, injury and illness documentation (SH 900, SH 900.1 and SH 900.2), workers' compensation reports, disciplinary reports, and any record of threats
- Review and assess relevant policies, work practices, and work procedures that may impact the risk of workplace violence.
- Evaluation of the Physical Environment such as:
  - o Duties that involve mobile workplace assignments
  - Working alone or in small numbers
  - o Exchanging money with the public
  - Handling internal employee disputes
  - o Areas of previous security problems
  - Working in public settings

The Authority has implemented the following safeguards to address each risk factor such as:

- 1. Training to increase employee awareness of the signs/effects of workplace violence
- 2. Increased security (alarms, cameras and eliminate open access to buildings)
- 3. Additional lighting

Each Division will complete an annual Workplace Security Checklist, with findings compiled by the Director of Human Resources and reviewed by the Safety Committee for suggested actions for Executive Director's final review and approval.

# E. Employee Reporting of Workplace Violence Prevention Concerns or Incidents

Any employee, or their employee representative, who believes a serious violation of the Authority's workplace violence protection program exists, or that a workplace violence imminent danger exists, must inform their Division Director in the form of a written notice. The Authority must be given a reasonable opportunity to correct such activity, policy, or practice.

Written notice is not required if there is an imminent danger to the safety of a specific employee or overall health and safety of others, and the employee reasonably believes in good faith that reporting to a Division Director would not result in corrective action. Note: Employers are prohibited from retaliating against any employee for exercising their rights as outlined.

If, after notifying the Division Director and allowing the Authority a reasonable chance to rectify the situation, the employee still believes a serious violation or imminent danger persists, they may request an inspection by contacting the Public Employee Safety and Health Bureau ("PESH") at the New York State Department of Labor. This request must be in writing, clearly outlining the grounds for the notice, and signed by the employee or their authorized employee representative.

# F. Training

All employees must receive Workplace Violence Prevention Training at time of hire and annually thereafter. Training records must be maintained for each training session for a minimum of 5 years. Employee training must cover:

- 1. The requirements of the workplace violence prevention regulation
- 2. The risk factors that were identified in the risk evaluation
- 3. Measures employees can take to protect themselves from identified risks
- 4. Procedures that the employer has implemented to protect employees
- 5. Incident alert and notification procedures
- 6. Appropriate work practices and emergency procedures
- 7. The location of the written workplace violence prevention program and how to obtain a copy

REFERENCE: 12 NYCRR PART 800.6 PUBLIC EMPLOYER WORKPLACE VIOLENCE PREVENTION PROGRAM.

#### 3.13 HANDLING PYROTECHNICS FOR VECTOR CONTROL

Pyrotechnics (launchers, bird bangers, siren screamers, shell crackers, etc.) are potentially dangerous and must be handled with extreme care at all times. Pyrotechnic devices include hand launchers, cartridges and blank propulsion rounds. Mandatory requirements for all MMF employees who utilize pyrotechnics for vector control (specifically, gulls) are:

- 1. Manufacturer's instructions shall be followed at all times.
- 2. Vectors to be controlled are birds (gulls).
- 3. The use of pyrotechnic devices shall be limited while still providing adequate vector control.
- 4. The following job classifications have been designated to use pyrotechnics for the control vectors:

- a. Equipment Operator CDL-A
- b. Equipment Operator CDL-B
- c. Environmental Specialist
- d. Environmental Technician I
- e. MMF Maintenance Technician Assistant
- 5. All pyrotechnic equipment and supplies shall be kept in secure locations when not in use.
- 6. Pyrotechnics shall not be fired from inside any vehicle or equipment.
- 7. Pyrotechnics devices shall never be discharged towards any person, vehicle or equipment.
- 8. When using any pyrotechnics device, the employee shall wear MMF approved hearing protection and eye protection.
- 9. All launchers shall be inspected, cleaned and maintained in accordance with manufacturers' instructions.
- 10. Only MMF provided pyrotechnic devices shall be used on the MMF site.
- 11. Supervisors shall conduct initial and annual operation and safety training for employees who will use any pyrotechnics device.
- 12. Failure by any employee to follow this policy will result in disciplinary action up to and including termination of employment.

#### **SECTION 4.0 HAZARDOUS MATERIALS**

#### 4.1 HAZARD COMMUNICATION

#### A. Introduction

The purpose of this section is to outline procedures to reduce hazards to employees when working around or with potential hazardous chemicals.

This program includes guidelines on identification of chemical hazards and the preparation and proper use of containers, labels, placards and other types of warning devices.

- B. Chemical Inventory and Safety Data Sheets (SDSs)
  - 1. The Division Directors will designate a responsible employee at each site to be the Hazard Communication Subject Matter Expert (SMEs) in terms of initial screening of new hazardous materials that may be used at the facility. The SME will input the SDS for any new materials into 3E and provide a copy to the EHSE. The EHSE will be consulted when new hazardous materials are considered to ensure that products conform to the Authority's

Environmental Policy Statement, Green Cleaning Procurement Policy, Pesticide Use Policy, and other sustainability goals throughout the organization. This employee will also maintain an inventory of all known chemicals in use on the worksite, if required for the particular division.

2. Employees working with hazardous chemicals must have 24-hour access to the safety data sheets (SDSs) for these chemicals. The Authority subscribes to an outside service, 3E Company, for SDSs. Employees should call 1-800-451-8346 for any SDS. Employees can also access SDSs through the website <a href="http://www.3eonline.com/eeeOnlinePortal/DesktopDefault.aspx">http://www.3eonline.com/eeeOnlinePortal/DesktopDefault.aspx</a>. A link to the 3e service is located on the Intranet.

The Authority's general login identification is "DANCMSDS". The password is "danc". SMEs have a higher level of security with the 3E system that allows them to update their chemical inventories, print reports, etc. Administration of the 3E system is managed by the EHSE.

- 3. Any hazardous chemicals received or handled by Authority personnel must have a safety data sheet (SDS) and be included in the hazardous chemical inventory list. SDSs received with hazardous chemicals must be given to the SME. If the SDS is already listed on the chemical inventory, then no action is needed. If the SDS is not currently on file, the site SME will update the inventory. The SME will also notify the Division Director when new hazardous materials are added to ensure that employees are trained on the use of the product prior to use. No new hazardous materials will be purchased without the approval of the site SME and the EHSE.
- 4. The chemical inventory will be reviewed and updated as changes occur and as scheduled annually on the Environmental and Safety Compliance Matrix. Items no longer found at the facility will be removed from the inventory. The SDSs for items no longer found at the facility are maintained in the 3E online catalog in accordance with regulatory requirements for 30 years.
- 5. Annually the EHSE or their designee shall review the chemical inventories and disposal lists, provide any needed HMIS codes and report progress on hazardous chemical reduction efforts.

# C. Container Labeling

- 1. All chemicals on site will be stored in their original or approved containers with a proper label attached, except small quantities for immediate use. Notify a supervisor if any container is not properly labeled. The supervisor will ensure the container is labeled and/or disposed.
- Workers may dispense chemicals from original containers only in small quantities intended for immediate use. Any chemical left after work is completed, must be returned to the original container or to the Supervisor for proper handling.

- 3. No unmarked containers of any size are to be left in the work area unattended.
- 4. The Authority will rely on manufacturer applied labels whenever possible and will ensure that these labels are maintained. Containers that are not labeled, or on which the manufacturer's label have been removed will be relabeled.
- 5. All facility personnel are responsible for ensuring that containers in their work areas are labeled with the identity of the hazardous chemical contained and any appropriate hazard warnings.

# D. Employee Training

- 1. Employees will be trained to work safely with hazardous chemicals prior to being exposed to these materials.
- 2. Employee training will include:
  - a. Methods that may be used to detect a release of a hazardous chemical(s) in the workplace.
  - Physical and health hazards associated with chemicals.
  - c. Protective measures to be taken.
  - d. Safe work practices, emergency responses and use of personal protective equipment.
  - e. Information on Hazard Communication Standard, including labeling and warning systems and an explanation of the Globally Harmonized System for SDSs.
- 3. SMEs will receive annual training on the 3E system the Authority uses to manage its chemical inventory, Authority procedures for purchasing hazardous materials and OSHA Hazard Communication requirements.

## E. Personal Protective Equipment (PPE)

- 1. Employees must comply with the PPE requirements listed on the SDS or as specified in other more detailed operating procedures.
- 2. Required PPE is available from the Division Directors and supervisors.

## F. Emergency Response

1. Any incident or overexposure or spill of a hazardous chemical/substance must be immediately reported to a supervisor or Division Director.

2. An Environmental Incident Report is required for all hazardous material spills that could impact employee health or the environment. This form is located on OnBase™.

#### G. Hazards of Non-Routine Tasks

- 1. Employees will be informed of any special tasks that may arise which would involve possible exposure to hazardous chemicals.
- 2. Review of safe work procedures and use of required PPE will be conducted prior to the start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

# H. Informing Contractors

- Other contract/consulting employees performing work at an Authority facility is required to adhere to the provisions of the Hazard Communication Standard. These procedures are detailed in the Contractor Safety Policy which should be provided to all contractors prior to the start of onsite work.
- The Authority is responsible for providing outside agencies with information on the hazardous chemicals that contract employees may come in contact with. This communication should include copies of SDSs and any other relevant emergency response procedures and protocols.

## **SECTION 5.0 PERSONAL PROTECTIVE EQUIPMENT**

### 5.1 CLOTHING & PERSONAL PROTECTIVE EQUIPMENT

#### A. Clothing

All technical personnel are required to wear uniforms, if provided. Office personnel should dress appropriately for the job they are doing. Technical personnel performing hot work, that work around moving machinery, etc. should be sure that clothing worn is not highly flammable. Neckties and loose, torn, or ragged clothing should not be worn while working around machinery with moving parts.

#### B. Shoes

Safety shoes must be worn by all employees, visitors, and contractors that could be exposed to foot injuries and shall be worn in the designated areas listed below or when performing tasks where the risk of foot injury is present (lifting heavy objects, etc.). Contractors must also comply with the Authority Contractor Rules and Responsibilities (Form 8). Designated areas where safety shoes must be worn include:

- The lined landfill footprint (see additional requirements for puncture resistant footwear for work within the uncapped area of the landfill below)
- Active construction sites
- Water and Wastewater Treatment Facilities and Pumping Stations

- Telecommunications Central Offices
- Power & Gas Stations

Employees, visitors, and contractors who visit the above listed sites and are escorted by an Authority employee are not required to wear safety shoes if they do not perform work that exposes them to a risk of foot injury. Safety shoes are not required for individuals who remain in a vehicle for the duration of their visit to any of the above listed sites. If unsure whether safety shoes are required for a given location or activity, consult with the EHSE before proceeding.

All safety footwear shall comply with ASTM F-2412-18a, "Standard Test Methods for Foot Protection," and ASTM F-2413-2018, "Standard Specification for Performance Requirements for Protective Footwear," which are incorporated by reference in 29 CFR 1910.132 "Personal Protective Equipment – General Requirements."

Further, those employees that work in the open face or uncapped area of the Landfill must wear safety shoes or shoe inserts that are puncture resistant. Safety shoes or shoe inserts meeting this requirement will have a "PR" designation, or be marked as complying with ASTM 2413-18. Note that a boot with a steel shank alone does not constitute puncture resistance. Employees, visitors, and contractors without puncture resistant safety shoes or inserts shall not be allowed to exit a vehicle within the uncapped area of the Landfill.

If working outdoors on icy terrain, the use of traction cleats is encouraged. Traction cleats are provided by your supervisor.

Employees, with job duties that necessitate specialized PPE, may qualify for the following stipends to purchase their protective equipment (Note: The Authority will allocate an amount as specified in the Uniform Allowance Standard Operating Procedure):

- Annual allowance for approved standard safety footwear, and
- An additional allowance every 2 years for approved cold-weather safety footwear which meets the requirements detailed above.

Employee's must obtain approval from the Administrative Coordinator and the EHSE prior to purchasing safety shoes to ensure the purchase qualifies as a reimbursable expense, and the selected PPE meets applicable ASTM standards. Employee's must complete the Safety Shoe Request Form in OnBase to initiate approval and include photos documenting compliance with the ASTM standards listed on the form.

Purchases may be made through the approved Authority Vendors or purchased directly by the employee and submitted on an expense report through OnBase™ for supervisor approval. To request approval for new safety shoes employees shall submit a Safety Shoe Request Form in OnBase™.

# C. Jewelry

Jewelry includes watches, rings, bracelets, earrings, necklaces, body piercings and facial jewelry. Jewelry at work can be a major safety hazard and cause serious injuries. Jewelry has the potential to become caught in power tools, stuck against objects or moving parts of machinery, caught on items, and to conduct electricity. Wearing jewelry at work could result in torn earlobes, injured fingers, hands, wrists, and neck; amputation of fingers or limbs, and electrical shock.

To prevent injuries, wearing of exposed jewelry while performing these tasks is prohibited:

- Climbing ladders
- Entering confined spaces (permit or non-permit required)
- Performing electrical or mechanical maintenance on any equipment
- Welding
- Working with DC Power in Telecommunications Central Offices

# NOTE: Silicone weddings rings are an exception to this policy and may be worn while performing the tasks noted above.

#### D. Head Protection

Head protection must comply with any of the following consensus standards: ANSI Z89.1-2014 (R2019), "American National Standard for Industrial Head Protection." Hard hats must be worn in all designated areas or whenever a head-hazard is present. This requires that hardhats be used when:

- Operating or working around an overhead crane;
- Working near excavation or other heavy equipment
- Anytime exiting a vehicle on State, County and Town Rights of way for the purpose of Telecom Engineering or Construction Project Management;
- When entering an aerial and/or underground construction operations zone and when using screening equipment.

## E. Eye Protection

Safety glasses are required when working around operations exposing you to eye injuries. To assist employees in complying with this requirement, the Authority will provide safety glasses meeting ANSI/ISEA Z87.1-2020, Occupational and Educational Personal Eye and Face Protection Devices, in accordance with 29 CFR 1910.133.

Safety glasses may be requested from the Supervisor.

Goggles, helmets, and shields provide the maximum eye protection and should be worn when welding, cutting, grinding, using concrete or metal saws, or like situations. Contact lenses should not be worn where the potential hazards of liquids, dust, fumes, or vapors exist.

Employees that need corrective lenses will be provided with one pair of prescription safety glasses per two-year time period. Requests for replacement glasses at an interval less than two years will be handled on a case-by-case basis

and will be at the Division Director's discretion based on the circumstances requiring replacement. Employees will be permitted to select the type and style of the glasses provided that the cost to the Authority does not exceed \$250 per pair. A service provider chosen by the Authority will provide the safety glasses to employees. To request approval for new prescription safety glasses employees shall submit the Safety Glasses Request form in OnBase™.

## F. Hand Protection

Gloves shall be worn whenever handling objects or substances that could cut, tear, or burn the hands. Gloves should **NOT** be worn while operating lathes, drill presses, reamers, other machines with revolving spindles or cutting tools and working with DC Power within Telecom Central Office Facilities.

## G. Ear Protection

Hearing protection is required in designated areas or when operating loud equipment such as lawn mowers, chain saws, while working around generators, etc.

### H. Long Hair / Facial Hair

Employees wearing long hair, beards, or mustaches will not work with rotating machinery or equipment, or use respiratory equipment if their hair, beard, or mustache constitutes a potential hazard. The Division Director will make judgment if an issue is raised.

### I. High Visibility Apparel

High visibility apparel, meeting ANSI 107-2020 Class II Standards, is required for <u>all</u> persons (employees, customers, contractors, and visitors) while outside their vehicle <u>in the active landfill area</u>. Employees working on or within ten (10) feet adjacent to State, County, or local roads, must also wear high visibility apparel, and must follow the requirements for "flagging" described in Section 7.2.

#### J. Winter Wear

Carhartt or other comparable coveralls and coats are required for many Authority employees that work outdoors. The Authority will provide MMF employees with winter gloves and with a high-vis winter coat, which will remain Authority property. The Uniform Allowance Standard Operating Procedure establishes job titles that are eligible for an allowance for winter wear.

## **SECTION 6.0 FIRE PROTECTION AND PREVENTION**

## 6.1 FIRE PROTECTION

#### A. Introduction

Health and Safety Manual
Development Authority of the North Country

The purpose of this section is to outline procedures to reduce hazards to the employee for fire and to develop a fire protection program.

## B. General Requirements:

- 1. Access to available fire extinguishers will be maintained at all times.
- 2. All fire extinguishers provided by Authority, will be conspicuously located.
- 3. In accordance with 29 CFR 1910.157, Authority employees working at a facility that has portable fire extinguishers will be trained on their proper use on an annual basis. Staff are not to utilize or operate fire extinguishers at the State Office Building. Therefore, fire extinguisher training is not required for staff whose primary work location is the State Office Building.

# C. Portable Fire Equipment:

For each 3,000 sq. ft. of the protected building area, the following will be provided:

- 1. A fire extinguisher, rated not less than 2A.
- 2. Travel distance from any point of the protected area to the nearest fire extinguisher will not exceed 100 feet.
- 3. One or more fire extinguishers, rated at not less than 2A, will be provided on each floor.
- 4. Extinguishers will be protected from freezing.
- 5. Fire extinguishers must be listed or approved by a nationally recognized testing laboratory.

### D. Maintenance of Portable Fire Extinguishers

- 1. Authority employees will inspect portable fire extinguishers monthly, and the inspection card on the fire extinguisher filled out accordingly.
- 2. Each fire extinguisher will be inspected and certified yearly by a qualified vendor in the business of fire protection inspection and equipment.

# E. Fire Alarm Devices

- 1. Fire alarm devices will be maintained at all Authority owned buildings in accordance with the National Fire Protection Association codes and applicable state and local requirements.
- 2. Each building fire alarm will automatically activate, utilizing direct dial or vendor alarm monitoring to the local fire department.

3. Fire alarm devices will be maintained and inspected on an annual basis by a licensed employee in security and fire alarm systems.

#### 6.2 FIRE PREVENTION

#### A. Introduction

An important part of the fire protection program is fire prevention. This section outlines procedures to be followed to prevent fires.

## B. Indoor Storage

- 1. Stored materials shall not obstruct, or adversely affect, means of exit.
- 2. All materials shall be stored, handled, and piled with due regard to their fire characteristics.
- 3. Non-compatible materials, which may create a fire hazard, shall be segregated by a barrier having the fire resistance of at least one hour.
- 4. Materials shall be piled to minimize the spread of fire internally and to permit convenient access for firefighting. Stable piling shall be maintained at all times. Aisle space shall be maintained to safely accommodate the widest equipment that may be used within the building for firefighting purposes.
- 5. Clearance of at least 36 inches shall be maintained between the top level of the stored material and the smoke and heat detectors.
- 6. Clearance shall be maintained around lights and heating units to prevent ignition of combustible materials.
- 7. A clearance of 24 inches shall be maintained around the path of travel of fire doors unless a barricade is provided, in which case no clearance is needed. Materials shall not be stored within 36 inches of a fire door opening.

# C. Ignition Hazards

- 1. Electrical wiring and equipment for light, heat, or power purposes shall be installed in compliance with the appropriate regulations.
- 2. Internal combustion engine powered equipment shall be located so that the exhausts are well away from combustible materials. When the exhausts are piped to outside the building under construction, a clearance of at least six inches shall be maintained between such piping and combustible material.

## D. Open Yard Storage

- 1. Combustible materials shall be piled with due regard to the stability of piles, and in no case higher than 20 feet.
- 2. Driveways between and around combustible storage piles shall be at least 15 feet wide and maintained free from accumulation of rubbish, equipment, or other articles or materials.
- 3. The entire storage site shall be kept free from accumulation of unnecessary combustible materials. Weeds and grass shall be kept down and periodic cleanup of the entire area completed on an as-needed basis.
- 4. Where there is danger of an underground fire, that land shall not be used for combustible or flammable materials storage.
- 5. Piles shall be orderly and regular. No combustible material shall be stored outdoors within 10 feet of a structure.

# 6.3 FLAMMABLE AND COMBUSTIBLE LIQUIDS, GASES AND EXPLOSIVE MIXTURES

#### A. Introduction

The purpose of this section is to outline procedures to reduce hazards to employees in handling flammable and combustible liquids, gases and explosive mixtures.

# B. Safety Cans

- 1. Approved safety cans are required for the handling and use of flammable liquids in quantities greater than one gallon, except those flammable liquids that are highly viscous (extremely hard to pour), which may be used and handled in the original shipping containers.
- 2. For quantities one gallon or more, only the approved safety containers shall be used for storage, use, and handling of flammable liquids.

## C. Indoor Storage of Flammable and Combustible Liquids

- 1. Flammable or combustible liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.
- 2. No more than 25 gallons of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet.
- 3. Quantities of flammable and combustible liquids in excess of 25 gallons shall be stored in an acceptable or approved cabinet labeled in conspicuous lettering, "Flammable -- Keep Fire Away".
- 4. Not more than 60 gallons of combustible liquids shall be stored in any one storage cabinet. Not more than three such cabinets may be located in a

single storage area. Quantities in excess of this shall be stored in an inside storage room constructed to comply with the test specifications set forth in NFPA 251-1969.

- 5. Materials that will react with water and create a fire hazard will not be stored in the same room with flammable and combustible liquids.
- 6. Electrical wiring and equipment located inside flammable storage rooms shall be approved for Class I, Division 1, Hazardous Locations.
- 7. Every inside storage room shall be provided with either a gravity or a mechanical exhausting system. Such a system shall commence not more than 12 inches above the floor and be designed to provide for a completed change of air within the room at least six times per hour.
- 8. Inside each storage room there shall be maintained one clear aisle at least three feet wide.
- 9. Containers over 30 gallons capacity shall not be stacked one upon the other.
- Flammable and combustible liquids in excess of that permitted in inside storage rooms shall be stored outside of the building in accordance with Section C of this section.
- 11. At least one portable fire extinguisher, having a rating of not less than 20-B units, shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage.

## D. Storage Outside Building

- 1. Flammable or combustible liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.
- 2. Storage containers (not more than 60 gallons each) shall not exceed 1,100 gallons in any one pile or area. Piles or groups of containers shall be separated by a five-foot clearance. Piles or groups of containers shall not be nearer than 20 feet to a building.
- 3. The storage area shall be graded in a manner to divert possible spills away from buildings or other exposures.
- 4. Portable tanks shall not be closer than 20 feet from any building.
- 5. Storage areas shall be kept clear of weeds, debris, and other combustible material not necessary to the storage.
- 6. Portable tanks shall be provided with the appropriate emergency venting devices.

7. At least one portable fire extinguisher having a rating of not less than 20-B units shall be located as near as 25 feet, but no further than 75 feet away from the portable storage tanks.

## E. Fire Control for Flammable or Combustible Liquid Storage

At least one portable fire extinguisher having a rating of not less than 20-B:C units shall be provided on all tank trucks or other vehicles used for transporting and/or dispensing flammable or combustible liquids.

# F. Handling Liquids at Point of Use

- 1. Flammable liquids shall be kept in closed containers when not actually in use.
- 2. Leakage or spillage of flammable or combustible liquids shall be cleaned and disposed of promptly and safely.

Flammable liquids may be used only where there are no open flames or other sources of ignition within 50 feet of the operation, unless conditions warrant greater clearance.

## G. Procedures for Backfilling Gas Wells

- 1. Soil should be thoroughly compacted in a five-foot radius around gas well piping at a minimum of one foot 6-inch layers. This procedure will greatly reduce fugitive gases around the gas well pipe and promote a safer environment for use of passive flares.
- 2. The use of a propane torch to ignite passive flares is prohibited.

## 6.4 LANDFILL - FIRE PREVENTION AND CONTROL

This section is specific to MMF fire prevention and control in outdoor (i.e., non-building areas) of the landfill.

### A. Responsibilities

- Landfill Superintendent or Assistant Landfill Superintendent shall direct fire response in accordance with the training received through NYS Landfill Operator Training.
  - Working Face: It is possible that the landfill could receive a "hot Load". This is a load of waste, that for whatever reason ignites when dumped. To prevent this from getting worse the primary dozer operator will push this hot load away from the working face onto a soil based area. The load will be spread out and soil will be placed on the smoldering or burning waste to extinguish the fire. The Primary dozer operator will call for the water truck to report immediately to the working face for a

hot load. The water truck operator will sufficiently spray the area to ensure it is complexly out.

- Outside of the Working Face: The MMF does not have a fire brigade and does not train staff to fight fires. Unless it is safe to attempt to extinguish the fire with a fire extinguisher, the person responsible for identifying the fire will immediately call 911 to report the fire. They will also immediately notify the Division Director.
- Ensure that all employees are properly trained and aware of this plan by performing and annual training and walk through at the same time as the annual building fire and training and walk through.
- Ensure that the responding fire department is familiar with conditions at the landfill and the parameters of landfill fires.
- Keep historical logs of events surrounding each fire.

## 2. Landfill employees:

- Understand their role in responding to fires.
- Notify the responsible supervisor whenever an emergency situation exists.
- Alert any nearby persons and report to the gathering area.
- Maintain an open communication with the firefighting team.

#### B. Prevention

The landfill facility will operate in a manner that will minimize the potential for landfill fires. This will include properly screening waste to prevent loads that contain embers or smoldering materials from entering the working face of the landfill, thoroughly compacting all waste and applying daily cover, and employee training to recognize fires or potentials for fires.

As part of incoming waste screening practices, waste loads will be screened for any indication that a waste load is smoldering or on fire.

## C. Response

The Authority does not have a fire brigade. As such, personnel may only respond to incipient fires. An incipient fire is defined, according to 29 CFR 1910.155(c)(26), as a fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, class II standpipe or small hose systems without the need for protective clothing or breathing apparatus.

Landfill personnel will respond to incipient fires with extinguishers, dirt and/or water as necessary, provided that they respond in a safe manner without donning protective clothing or breathing apparatus. Landfill personnel will not respond to fires that are beyond initial stages or cannot be extinguished safely without protective clothing or breathing apparatus.

All landfill heavy equipment and over the road vehicles are equipped with a fire extinguisher.

- 1. Upon discovering a smoldering waste load or incipient landfill fire, immediately notify the Landfill Superintendent or Division Director. The Division Director, or supervisor in charge if the Division Director is not onsite, will notify 911 if appropriate given nature of incident.
- 2. If the 911 call is made steps shall be taken to ensure all emergency vehicles are met at the front gate and escorted to the scene. Consideration should be given that there will be multiple emergency vehicles based on the what was reported to 911.
- 3. In the event that a smoldering load has been identified upon entry into the facility, the Scale Operator will IMMEDIATELY instruct the driver to the proper area for unloading.

The Scale Operator will notify the appropriate supervisor who will direct the driver to empty the load and move the vehicle away from the hot load.

During this time, the water truck and soil will be moved to the area for extinguishing the load. The Assistant Landfill Superintendent will coordinate the activities of operators to apply water and/or soil to the hot load.

- 4. Notify all personnel to evacuate the area and secure the site, as appropriate.
- 5. Assess whether you are able to safely extinguish the fire without the use of protective clothing or breathing apparatus using portable fire extinguishers, small hose systems, etc.
- 6. Do not attempt to extinguish the fire alone; make sure there is another employee present to observe and assist.
- 7. Do not place yourself or others in danger when trying to extinguish the fire.
- 8. Stay upwind of fire and smoke.
- 9. If it can be accomplished safely remove all equipment from the area.
- 10. If it can be accomplished safely, use the dozer to push dirt around the fire as a fire break.

- 11. NEVER drive a machine onto burning material.
- 12. When the Fire Department responds follow their direction.

All attempts will be made to minimize personal injury, property damage and traffic congestion so that normal work routines may resume once the incident has been resolved.

## SECTION 7.0 SIGNS, SIGNALS AND BARRICADES

#### 7.1 SAFETY SIGNS

#### A. General

Signs and symbols are required by OSHA to indicate certain hazards. These signs must be visible at all times when work is being performed, and shall be removed or covered promptly when the hazards no longer exist.

## B. Danger Signs

- 1. Danger signs will be used only where an immediate hazard exists.
- 2. Danger signs will have red as the predominating color for the upper panel; black outline on the borders; and a white lower panel for additional sign wording.

## C. Caution Signs

- 1. Caution signs will be used only to warn against potential hazards or to caution against unsafe practices.
- Caution signs will have yellow as the predominating color; black upper panel and borders; yellow lettering of "<u>caution</u>" on the black panel; and the lower yellow panel for additional sign wording. Black lettering will be used for additional wording.

## D. Exit signs

Exit signs, when required, will be lettered in legible red letters, not less than 6 inches high, on a white field and the principal stroke of the letters will be at least three-quarters of an inch in width.

# E. Safety Instruction Signs

Safety instructions signs, when used, will be white with green upper panel with white letters to convey the principal message. Any additional wording on the sign will be black letters on the white background.

### F. Directional Signs

Directional signs, other than automotive traffic signs, will be white with a black panel and a white directional symbol. Any additional wording on the sign will be black letters on the white background.

# G. Traffic Signs

Construction areas shall be posted with legible traffic signs at points of hazard. All traffic control signs or devices used for protection of construction workmen shall conform to the New York Department of Transportation (NYSDOT), Manual of Uniform Traffic Control Devices.

#### 7.2 TRAFFIC CONTROL

## A. Flag person

When operations are such that signs, signals, and barricades do not provide the necessary protection on or adjacent to a highway or street, a flag person or other appropriate traffic controls shall be provided.

Flag persons will use orange flags at least 18 inches square or sign paddles.

Flagging during darkness or periods of limited visibility will be conducted using orange lights or other approved illuminated devices.

Flag persons will wear a hardhat and high visibility clothing meeting requirements specified in Section 5.1. Flag persons will be trained in traffic control and direction in accordance with NYSDOT Manual or Uniform Traffic Control Devices.

#### B. Barricades

Barricades for the protection of employees shall conform to the portions of the NYSDOT manual of uniform traffic control devices relating to barricades.

## SECTION 8.0 MATERIALS HANDLING, STORAGE, USE AND DISPOSAL

#### 8.1 STORAGE

#### A. Introduction

The purpose of this section is to outline specific procedures for storage of materials at the facilities owned by the Authority.

This section will be used in conjunction with Section 6.2 - Fire Prevention, which provides specific storage requirements to prevent fire hazards.

#### B. General

- 1. All materials stored in tiers will be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse.
- 2. Maximum safe load limits of floors within building structures, in pounds per square foot (psf) will be conspicuously posed in all storage areas, except for floor or slab on grade. Maximum safe loads will not be exceeded.
- Aisles and passageways will be kept clear to provide for the free and safe movement of material handling equipment or employees. Such areas will be kept in good repair.
- 4. When a difference in road or working levels exists, means such as ramps, blocking, or grading will be used to facilitate the safe movement of vehicles between the two levels. All ramps or grading will be designed to the latest safety standards.

## C. Material Storage

- 1. Material stored inside buildings will not be placed within 6 feet of any equipment.
- 2. Non-compatible materials will be segregated in storage.
- 3. Bagged and bundled materials will be stacked, interlocked, and limited in height so they are stable and secure against sliding and/or collapse.

#### 4. Lumber:

- a. Used lumber will have all nails withdrawn before stacking.
- b. Lumber will be stacked on level and solidly supported sills.
- c. Lumber will be so stacked as to be stable and self-supporting.
- d. Lumber piles will not exceed 5 feet in height.
- 5. Structural steel, poles, pipe, bar stock, and other cylindrical materials, unless racked, will be stacked and blocked so as to prevent spreading or tilting.
- 6. Storage of materials shall not create a hazard. Materials that could create a hazard must be stored in a secure room, building, or fenced area that is lockable.
- 7. Storage areas will be kept free from accumulation of materials that constitute hazards from tipping, fire, debris, and/or potential collapse. Outside storage area vegetation will be maintained and controlled.

#### 8.2 MATERIAL HANDLING

#### A. Introduction

The purpose of this section is to outline specific procedures for material handling.

### B. Use of Mechanical Equipment

Where mechanical handling equipment is used, sufficient safe clearance will be allowed for aisles, at loading docks, through doorways, and wherever turns or passages must be made. Aisles and passageways will be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard. Permanent aisles and passageways will be appropriately marked.

#### C. General

- 1. All equipment, aisles, doorways, and docks will have clearance signs to warn of clearance limits.
- 2. Covers and/or guardrails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ramps, ditches, etc., as per Section 3.9 Fall Protection of this Health and Safety Manual.
- 3. All lifting equipment, straps, cranes will have a weight rating which exceeds the material to be lifted.
- 4. All lifting straps and slings must be inspected prior to and after use. Damaged equipment must immediately be destroyed.
- 5. All straps used to tie down equipment of trailers must have a weight capacity rating which exceeds the equipment being transported.
- 6. All equipment being transported on trailers must be tied down or secured.
- 7. Know the approximate weight of your load and make certain your equipment is rated to handle it. (All powered equipment and rigging is rated as to safe working load. This rating is posted on the equipment. Never exceed the manufacturer's recommended safe working load).
- 8. Lift heavy objects as instructed, with the leg muscles and not with the back. On average, do not manually lift over 50 pounds.
- 9. Use an appropriate, approved lifting device (i.e., special trucks, racks, hoists, and other devices) for lifting very heavy, bulky or large objects.
- 10. All ropes, chains, cables, slings, etc., and other hoisting equipment must be inspected each time before use.
- 11. A load should never be lifted and left unattended.

- 12. Properly stack and secure all materials prior to lifting or moving to prevent sliding, falling, or collapse.
- 13. Protruding nails or staples must be bent or pulled away whenever stripping forms or opening materials.
- 14. Avoid moving or lifting loads by hand whenever possible.
- 15. Tips for manual lifting:
  - Get a good footing
  - Place feet about shoulder width apart
  - Bend at the knees to grasp the weight
  - Keep back as straight as possible
  - · Get a firm hold
  - Lift gradually by straightening legs
  - Do not twist your back to turn. Move your feet
  - When the weight is too heavy or bulky for you to comfortably lift GET HELP
  - When putting the load down, reverse the above steps

**NOTE**: If lifting stacked materials, materials should be carefully piled and stable. Piles should not be stacked as to impair your vision or unbalance the load. Materials should not be stacked on any object (i.e., floor, scaffold) until the strength of the supporting members has been checked.

#### 8.3 DISPOSAL OF WASTE MATERIAL

#### A. Introduction

The purpose of this section is to outline specific requirements in the disposal of waste material.

#### B. General

- 1. All waste material and rubbish shall be removed from immediate work area as necessary and after the completion of the assigned task(s).
- Waste material and rubbish will be stored in designated waste cans or dumpster. Dumpster removal is to be maintained at least weekly with trash/waste cans emptied as needed.
- 3. All solvent waste, oily rags and flammable liquids shall be kept in fire resistant covered containers until removed from the site.
- 4. Any recycled materials will be separated and stored in designated areas or labeled containers. Cardboard will be disassembled, crushed and stacked.
- Hazardous and Universal Waste

The MMF or the WQ division may have a need to dispose of waste materials that require special handling as hazardous waste. Examples of potentially hazardous wastes include obsolete chemicals such as paints, solvents, degreasers, or other materials. These materials should be segregated from standard solid waste and evaluated by the EHSE to determine applicable disposal requirements. The Authority has a written Universal Waste Management SOP which details the specific requirements for different materials.

Batteries, fluorescent light bulbs, and mercury containing temperature controls should not be disposed of in regular trash. These materials should be collected and separated from regular trash and disposed of by an authorized service provider as they may contain heavy metals.

## C. Recycling

All Authority employees are required to practice recycling. The Authority has a written Recycling Guidance & Procedure which details the specific requirements for different materials.

## **SECTION 9.0 HAND AND POWER TOOLS**

### 9.1 HAND AND POWER TOOLS

#### A. Introduction

The purpose of this section is to outline specific procedures to reduce hazards to employees when utilizing hand and power tools.

#### B. General

- 1. All hand and power tools and similar will be kept cleaned and stored in a proper location, which is free from moisture or dust.
- 2. All hand and power tools will be inspected and maintained before use to ensure they are in safe, working condition.
- All power tools will be purchased with a grounding wire or be double insulated. If power tools do not have a grounding wire check for the square within a square icon on the nameplate to determine if it is double insulated. If needed a qualified electrician must install a grounding wire or the tool will not be utilized.
- 4. An inventory of all hand and power tools will be maintained.
- 5. When operating tools are designed to accommodate guards, they shall be equipped with such guards when in use.

- 6. All hand-held powered platform sanders, grinders with wheels, 2-inch diameter or less, routers, planers, shears, scroll saws, and jigsaws will be equipped with only a positive "on-off" control.
- 7. All hand-held powered drills, tappers, fastener sanders, reciprocating saws, saber saws, and other similar powered tools shall be equipped with a momentary contact on-off control and may have a lock-on control provided that turnoff can be accomplished by a single motion of the same fingers.
- 8. All other hand-held power tools, such as circular saws, chain saws, and percussion tools without positive accessory holding means shall be equipped with a constant pressure switch that will shut off the power when the pressure is released.
- 9. Power machines that are located in a fixed area shall be securely anchored to prevent walking or moving.

#### 9.2 OVERHEAD HOISTS

#### A. Introduction

The purpose of this section is to outline specific procedures to reduce hazards to employees and provide specific operating procedures when utilizing overhead hoists.

#### B. Locations

- 1. WQ Hoists/Cranes
  - a) Overhead powered hoist systems are located in the following areas:
    - Warneck Pump Station Crane Room
    - Warneck Pump Station Shop
    - WPS Screening Room
    - Booster Pump Station #1 Pump Room (over pumps)
    - Booster Pump Station #2 Pump Room (over pumps)
    - Malone WPCF Influent Building Garage Trolley
    - Malone WPCF Influent Building Garage Engine Hoist
    - Malone Duane Street Pump Station Electric Hoist
  - b) Overhead non-powered hoist systems are located in the following areas:
    - Fixed hoist in WPS Wetwell
    - Fixed hoist at Town of Cape Vincent/Authority Pump Station
    - Portable Electric Pick-Up Truck Mounted Hoist
    - Malone WPCF Influent Building Bypass Room Manual Chain and Trolley
    - Malone WPCF Primary Digester Building Manual Chain and Trolley

## 2. Carthage/West Carthage Cranes

TYPE	SIZE	LOCATIONS
Electric	3 Ton Overhead Crane	2nd Floor
		Main WPCF Building
Electric	1 Ton Overhead Crane	1st Floor Sludge Building
Electric	1 Ton Overhead Crane	Belt Dewater Press, Sludge Building
Manual	½ Ton Chain Hoist	Sludge Building
Manual	2 Ton Overhead Crane	RAS/WAS Pump Room (1st Floor below
		ground level) Main WPCF Building
Manual	2 Ton Chain Hoist	Primary Sludge Pump Room (1st Floor
		below ground level) Main WPCF Building
Manual	2 Ton Chain Hoist	Main Lift Pump Room
		(2 <sup>nd</sup> floor below ground level)
Electric	½ Ton Portable Winch &	Clarifiers
	Crane	

- Clayton and Ogdensburg specific devices are listed in their respective Health & Safety Manuals.
- 4. MMF Hoists/Cranes
  - MMF Leachate Loadout
  - MMF Maintenance Shop
  - MMF Main Pump Station
  - MMF Pump Station 3

#### C. General

- 1. All hoist systems will be inspected prior to use. Any deficiencies will be noted.
- 2. All hoist systems will also have a visual inspection before each use.
- 3. All hoist systems will have an annual inspection, to include checking connection, railings, bolts, chains, and hooks.
- 4. The safe working load of the overhead hoist, as determined by the manufacturer, shall be indicated on the hoist, and this safe working load shall not be exceeded.
- 5. The supporting structure to which the hoist is attached shall have a safe working load equal to that of the hoist.
- 6. The support shall be arranged so as to provide for free movement of the hoist and shall not restrict the hoist from lining itself up with the load.
- 7. The hoist shall be installed only in locations that will permit the operator to stand clear of the load at all times.

- 8. All overhead hoists in use shall meet the applicable requirements for construction, design, installation, testing, inspection, maintenance, and operation, as prescribed by the manufacturer.
- All powered cranes will be inspected on an annual basis in accordance with OSHA requirements. Inspections will be performed by a qualified crane/hoist agency. Results of these inspections will be documented and any deficiencies corrected.

## 9.3 JACKS

#### A. Introduction

The purpose of this section is to outline specific procedures to reduce hazards to employees when utilizing level and ratchet, screw, and hydraulic jacks.

#### B. General

- 1. The manufacturer's rated capacity shall be legibly marked on all jacks and shall not be exceeded.
- 2. All jacks shall have a positive stop to prevent over travel.
- 3. When it is necessary to provide a firm foundation, the base of the jack shall be blocked or cribbed. Where there is a possibility of slippage of the metal cap of the jack, a wood block shall be placed between the metal cap and load.
- 4. Hydraulic jacks exposed to freezing temperatures shall be supplied with adequate antifreeze liquid.
- 5. All jacks shall be properly lubricated at regular intervals and inspected for safe operation every 6 months.
- 6. Jacks that are out of order will be tagged accordingly, and shall not be used until repairs are made.

# SECTION 10.0 COMMON CONSTRUCTION-RELATED OPERATIONS

#### 10.1 CIVIL/MECHANICAL

Construction activities will be performed in accordance with the requirement identified in 29 CFR 1926.

Authority employees working in or around designated construction areas will wear safety shoes, hardhats and safety glasses.

Authority employees supervising construction activities will ensure that contractors follow all applicable safety requirements.

#### 10.2 ELECTRICAL

## A. Introduction

The purpose of this section is to outline specific procedures for electrical safety-related work practices.

#### B. General

- 1. No employer shall permit an employee to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by de-energizing the circuit and grounding it or by guarding it effectively by insulation or other means.
- 2. In work areas where the exact location of underground electric power lines is unknown, employees using jackhammers, bars, or other hand tools that may contact a line shall be provided with insulated protective gloves.
- 3. Before work is begun, the employee shall ascertain by inquiry or direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical contact with the electric power circuit. The employer shall post and maintain proper warning signs where such a circuit exists. The employer shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.
- 4. Work on energized equipment. Only qualified persons may work on electric circuit parts or equipment that has not been de-energized. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.
- 5. In existing installations, no changes in circuit protection shall be made to increase the load in excess of the load rating of the circuit wiring.
- 6. When fuses are installed or removed with one or both terminals energized, special tools insulated for the voltage shall be used.
- 7. Worn or frayed electric cords or cables shall not be used. Extension cords shall not be fastened with staples, hung from nails, or suspended by wire.
- 8. Routine opening and closing of electric power and lighting circuits: load rated switches, circuit breakers, or other devices specifically designed as disconnecting means shall be used for the opening, reversing, or closing of circuits under load conditions. Cable connectors not of the load break type,

fuses, terminal lugs, and cable splice connections may not be used for such purposes, except in an emergency.

- 9. Reclosing circuits after protective device operation: after a circuit is deenergized by a circuit protective device, the circuit protective device, the circuit may not be manually reenergized until it has been determined that the equipment and circuit can be safely energized. The repetitive manual reclosing of circuit breakers or reenergizing circuits through replaced fuses is prohibited.
- 10. Test instruments and equipment and all associated test leads, cables, power cords, probes, and connectors shall be visually inspected for external defects and damage before the equipment is used. If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item shall be removed from service, and no employee may use it until repairs and tests necessary to render the equipment safe have been made.
- 11. Test instruments and equipment and their accessories shall be rated for the circuits and equipment to which they will be connected and shall be designed for the environment in which they will be used.
- 12. Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metallic aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping, or other insulating means.
- 13. Housekeeping duties. Where live parts present an electrical contact hazard, employees may not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided. Electrically conductive cleaning materials (including conductive solids, such as steel wool, metallic cloth, and silicon carbide, as well as conductive liquid solutions) may not be used in proximity to energized parts unless procedures are followed which will prevent electrical contact.

## 10.3 STAIRWAYS AND LADDERS

## A. Introduction

The purpose of this section is to outline procedures in reducing hazards to employees when utilizing stairways and ladders.

#### B. General - Ladders

1. Inspect all ladders before use. Do not use any ladders with missing safety feet, missing or broken rungs, etc. Tag defective ladders with a "DO NOT USE" sign and report the defects immediately to a supervisor.

- 2. All portable ladders should be placed so that the base is away from the horizontal plane by one-fourth the ladder length (i.e., 12-foot ladder would be 3 feet from the wall).
- 3. Never climb a ladder that is unstable.
- 4. Never place a ladder in front of a door, unless the door is locked, guarded or otherwise blocked.
- 5. All ladders placed up against a stationary object must be tied off at the top to a secure point.
- 6. Ladders must extend at least three feet beyond the step off point.
- 7. Do not place a ladder close to live electrical wiring or against piping. Beware of overhead wires when moving an extended ladder. Do not use metal ladders near electrical power lines.
- 8. Portable ladders must be equipped with non-slip bases.
- 9. Face the ladder when ascending or descending.
- 10. Never stand at the top rung of a stepladder.

# C. General - Stairways

- 1. All stairways less than 44 inches wide with one open side must have one stair railing on the open side.
- 2. All stairways less than 44 inches wide with both sides open must have a stair railing on both sides.
- 3. All stairways more than 44 inches wide, but less than 88 inches wide, must have on each enclosed side a stair railing or one stair railing on each open side.
- 4. All stairways more than 88 inches must have railings on both sides and one intermediate stair rail located midway of the width.
- 5. All stairways will be installed using OSHA regulations and guidelines for new installation or temporary construction use.

#### 10.4 FLOOR AND WALL OPENINGS

#### A. Introduction

The purpose of this section is to outline procedures to reduce hazards to employees when working around floor and wall opening.

#### B. General

- 1. All floor openings shall be guarded with a standard railing exposed on all sides, except at an entrance to a stairway, or have a hinged opening cover of standard strength construction.
- 2. All floor opening rail systems shall be guarded by a standard toe board exposed on all sides, except at an entrance to the opening.
- 3. All floor opening hinged covers will be closed when the opening is not in use.
- 4. A standard manhole cover that need not be hinged in place shall guard all manhole openings. All manhole covers must be placed back into the opening after use of the opening.
- 5. Every wall opening from which there is a drop of more than 4 feet shall be guarded by an extension platform with a rail system.
- 6. Standard slats, grillwork, or rail system shall guard every wall opening from which there is a drop of more than 4 feet.

#### 10.5 MOTOR VEHICLE GENERAL RULES

- A. All employees who drive an Authority car or truck must abide by the Authority's Fleet Management Policy and the following safety rules:
  - 1. Any defects in the Authority vehicle should be reported promptly.
  - 2. Employees are required to obey all state, local, and Authority traffic regulations, to include use of hands-free telephone units.
  - 3. Section 1210, Sub. a, of the NYS Vehicle & Traffic Law reads as follows: "No person driving or in charge of a motor vehicle shall permit it to stand unattended without first stopping the engine, locking the ignition, removing the key from the vehicle, and effectively setting the brake thereon and, when standing upon any grade, turning the front wheels to the curb or side of the highway, provided, however, the provision for removing the key from the vehicle shall not require the removal of keys hidden from sight about the vehicle for convenience or emergency."
  - 4. Employees are not permitted to use personal cars or motorcycles for Authority business, unless specifically authorized by the supervisor.
  - 5. Employees should drive safely. All employees must practice defensive driving.
  - 6. Seat belts and shoulder harnesses are to be worn at all times.

- 7. Vehicles must be locked when unattended to avoid criminal misconduct.
- 8. Vehicles must be parked in legal spaces and must not obstruct traffic.
- 9. Employees should park their vehicles in well-lit areas at or near entrances to avoid criminal misconduct.
- 10. Employees should keep their headlights on at all times when driving a vehicle.
- 11. A vehicle when loaded with any material extending 4 feet or more beyond its rear shall have a red flag or cloth 12 inches square attached by day, or a red light visible for 300 feet by night, on the extreme end of the load.
- 12. Articles, tools, equipment, etc. placed in cars or truck cabs are to be hung or stored in such a manner as not to impair vision or in any way interfere with proper operation of the vehicle.
- 13. The most common type of vehicle accident is a backing accident. Due to limited vision out of the back windows drivers may not see other vehicles, obstacles, or even coworkers and pedestrians when they are driving their vehicles backward. Whether in a parking lot, on the road, or construction site, workers who learn the proper techniques can prevent backing accidents. Drivers should not put themselves into unnecessary backing situations, when possible drivers should choose parking spaces where you can drive in and drive out of, avoid parking too close to a corner, driveway, constructions site, or in a place where your vehicle will crowd other vehicles, if possible choose a parking location away from moving or parked vehicles, plan ahead to avoid backing wherever possible.

When a situation requires backing your vehicle perform a vehicle walk around to check underneath and all around it for obstacles and other dangerous situations. Inspect the doors and tailgates for proper closing and safe and secure storage for items and materials. Ensure that there is plenty of clearance around vehicle for backing, back slowly and check surroundings often.

At times, spotters can assist you with a backing maneuver by sharing the responsibility for watching the rear of the vehicle. If possible don't ask the spotter to exit the vehicle. If you must use a spotter outside the vehicle, make sure that you can see each other in the side-view mirror at all times. Do not proceed with backing if you lose sight of the spotter.

- 14. When you cannot see behind your vehicle, the driver shall walk behind the vehicle prior to backing.
- 15. Personal use of vehicles is not permitted without approval of management. Children are prohibited from being in Authority vehicles.

16. Operating an Authority vehicle while under the influence of alcohol and other drugs is prohibited. Violators are subject to termination of employment.

# B. Commercial Driver License (CDL)

- 1. Drivers, who operate a commercial vehicle, as defined below, are required to obtain a commercial driver's license.
  - a. A vehicle with a gross vehicle weight rating of 26,001 or greater pounds, or
  - b. A vehicle designed to transport 15 or more passengers (including the driver), or
  - A vehicle of any size transporting hazardous material in sufficient quantities meeting the hazardous materials transportation regulations posting requirements.
- 2. Drivers must meet the following requirements:
  - a. All commercial drivers must be in good health and pass a DOT physical. The doctor will provide the driver a medical examiner's certificate that must be carried at all times when driving. The certificate must be renewed every 2 years or as required by physician.
  - b. All commercial drivers must comply with the Authority's Drug and Alcohol-Free Workplace Policy and consent to testing as defined by DOT and the Authority.
  - c. Be at least 21 years of age.
  - d. Speak and read English well enough to do his/her job and respond to official questions.
  - e. Have a valid driver's license and pass a commercial driver's road test.
  - f. Take a DOT written exam for drivers.
  - g. Not be disqualified to drive a commercial motor vehicle.
  - h. Be able to determine whether the vehicle is safely loaded and know how to block, brace, and tie down cargo.

# 10.6 OPERATING OFF ROAD VEHICLES

#### A. General

The following is a list of requirements for motor vehicles that operate within an off-highway jobsite, not open to public traffic:

- 1. Only Authority-owned off road vehicles may be used for work purposes. No personal snowmobiles, all terrain, or utility vehicles may be used.
- 2. All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. These systems may use common components, and shall be maintained in operable condition.
- 3. Whenever visibility conditions warrant additional light, all vehicles, or combinations of vehicles, in use shall be equipped with at least two headlights and two taillights in operable condition. All vehicles or combination of vehicles shall have brake lights in operable condition regardless of light conditions.
- 4. All vehicles shall be equipped with an adequate audible warning device at the operator's station and be in an operable condition.
- 5. No employee shall use any motor vehicle equipment having an obstructed view to the rear unless:
  - a. The vehicle has a reverse signal alarm audible above the surrounding noise level, or
  - b. The vehicle is backed up only when an observer signals that it is safe to do so.
- 6. Cracked and broken glass shall be replaced. Vehicles operating in areas or under conditions that cause fogging or frosting of the windshields shall be equipped with operable defogging or defrosting devices.
- 7. All haulage vehicles, whose payload is loaded by means of cranes, power shovels, loaders, or similar equipment, shall have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.
- 8. Tools and material shall be secured to prevent movement when transported in the same compartment with employees.
- 9. Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried.
- 10. If motor vehicle contains a seat belt, then employees must utilize this device.
- 11. Trucks with dump bodies shall be equipped with positive means of support, permanently attached, and capable of being locked in position to prevent accidental lowering of the body while maintenance or inspection work is being done.

- 12. Operating levers controlling hoisting or dumping devices on haulage bodies shall be equipped with a latch or other device that will prevent accidental starting or tripping of the mechanism.
- 13. Trip handles for tailgates of dump trucks shall be so arranged that, in dumping, the operator will be in the clear.
- 14. All rubber-tired motor vehicle equipment manufactured on or after May 1, 1972, shall be equipped with fenders. Mud flaps may be used in lieu of fenders whenever motor vehicle equipment is not designed for fenders.
- 15. All vehicles in use shall be checked at the beginning of each workday to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., where such equipment is necessary.
- 16. Only employees of the Authority and designated personnel are authorized to ride in or operate "off-road" vehicles such as ATVs, snow mobiles, etc.
- 17. Employees must receive training of the safe use of the specific "off-road" vehicles prior to operation.
- B. All employees that operate an off-road vehicle must adhere to the following safety rules:
  - Manufacturer's recommendations must be followed for the safe operation of off-road vehicles. All drivers must read and follow the owner's manual carefully.
  - 2. Drivers and passengers of all-terrain vehicles (ATV's), utility vehicles (UTV's) and snow mobiles must wear a NYS DOT approved safety helmet. Other protective clothing may be required depending on the terrain (i.e. safety goggles for brush and debris, etc.)
  - 3. Drivers of off-road vehicles that are equipped with seat belts must wear them at all times.
  - 4. Operation on public roads or posted property is prohibited.
  - 5. Passengers may not be carried on single use vehicles.
  - 6. Only properly trained Authority employees are permitted to operate off-road vehicles.

- 7. Drivers will not leave a running vehicle unattended.
- 8. Drivers will not leave keys in an unattended vehicle.
- 9. Drivers will exercise caution while operating the vehicle. Carelessness is dangerous and will not be permitted.
- 10. Drivers will immediately report any defect in the vehicle.
- 11. All accidents, regardless of the seriousness must immediately be reported to your supervisor and an accident report completed.

## 10.7 POWERED INDUSTRIAL TRUCKS

## A. Introduction

The purpose of this section is to outline the safety requirements related to the operation of powered industrial trucks (PITs). PITs are commonly called forklifts or fork trucks that are used in many industries primarily to move materials. PIT types include: electric motor trucks, electric motor narrow aisle trucks, electric motor hand trucks or hand/rider trucks, internal combustion engine trucks, electric and internal combustion engine tractors and rough terrain forklift trucks. Employees under 18 years of age are prohibited from operating specified hazardous machines and equipment, including forklift trucks in non-agricultural operations.

## B. Requirements

All employees required to operate a PIT must be trained in accordance with OSHA standard 29 CFR 1910.178 (I)(2)(ii). The OSHA standard requires employers to develop and implement a training program based on the general principles of safe truck operation and the types of vehicle(s). Formal and practical training must be provided; the employer must certify each operator has received the training and evaluate each operator at least once every three years.

# C. General Training Information

- 1. Types, Features and Physics
  - a. Familiarize each operator with the basic types and functions of PITs.
  - b. Develop an understanding of the information shown on the data plate.
  - c. Understand the critical truck measurements that affect safety.
  - d. Understand the forces that cause tip-overs.

# 2. Inspecting the vehicle

a. Understand the purpose and importance of pre-operational checkouts.

- b. Provide a basic understanding of areas covered during a preoperational checkout.
- c. Familiarize each operational checkout, and what to do if a problem is discovered.

# 3. Driving the truck

- Understand the elements of safe movement of a PIT.
- Understand the differences between an automobile and a PIT.
- c. Recognize the safety hazards associated with operating a PIT.
- 4. Specific truck and workplace training/hands-on.
  - a. Review features of specific PIT to be operated.
  - b. Review operating procedures of specific PIT to be operated.
  - c. Review safety concerns of specific PIT to be operated.
  - d. Review workplace conditions and safety concerns of areas where PIT's will be operated.
  - e. Learn/practical actual operation of specific PITs to be operated and specific safety concerns where PITs will be operated.
  - f. Demonstrate proficiency performing the PIT operator duties specific to the trainee's position and workplace conditions.

#### 5. Safety concerns

- a. Review/reinforce potential of serious injury.
- b. Review/reinforce safety procedures in your facility.

## 10.8 OPERATING AERIAL LIFTS

The purpose of this section is to define the requirements and procedures for operating aerial lifts. All employees who operate aerial lifts must adhere to the following safety rules:

- 1. Any defects found must be reported immediately to the Division Director.
- 2. A full body harness shall be worn and a lanyard attached to the boom or basket when working from any aerial lift.
- 3. Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders or other devices for a work position.
- 4. Report any accident immediately to your supervisor.

#### 10.9 EXCAVATION AND TRENCHING

The Authority has developed this section to ensure the safety of employees who work in or around excavations as part of their job duties. The provisions in this section are also designed to protect employees and the general public who work or travel in the vicinity of excavations.

## A. General Requirements

- Employees who work in or around excavations must be provided training according to their work.
- 2. The excavation or trench must either be sloped/benched or supported as required to comply with OSHA requirements.
- 3. Traffic around the site must be controlled, and barricades, signs, and/or flag persons used as needed to control both vehicular and pedestrian traffic.
- 4. Utilities on the site must be protected and suitable precautions taken if any utility will be disturbed by the work. Local "Call Before You Dig" (Call 811) must be notified prior to any work.
- 5. Employees must use required personal protective equipment (PPE).
- 6. Each job site covered by this section must appoint one or more competent person(s) to ensure compliance.
- 7. Excavation work may involve safety hazards not addressed by this section including:
  - a. Work conducted on or around electrical utility systems;
  - Work that may impact existing utilities that may need to be locked and tagged out using procedures from the Lockout/Tagout Program;
  - Work conducted in areas where hazardous atmospheres or gases could accumulate (e.g. landfills, manure pits, gas distribution lines, or hazardous materials storage locations) covered under the Confined Space Program;
  - d. Work associated with electric power generation, transmission and distribution systems;
  - e. Fall hazards covered under the Fall Protection Program.

## B. Responsibilities

The Authority will provide worker training and competent person training.

#### 1. Competent Person

Each competent person is responsible for ensuring that procedures described in this section are followed including employee training, personal protective equipment, site inspections, tests, and record keeping.

The following positions are designated as competent person for purposes of this section:

- a. Landfill Superintendent
- b. Assistant Landfill Superintendent
- c. Director of Engineering

## 2. Employees

Each employee has the responsibility to follow established procedures, enter an excavation only after receiving training, and must demonstrate a complete understanding of the safe work practices to be followed while working in an excavation. Employees must wear the required personal protective equipment.

# C. Duties of the Competent Person

- 1. Maintain a copy of 29 CFR 1926- Subpart "P" and have a comprehensive knowledge of OSHA's Excavation Standards. In addition, competent persons shall have a general knowledge of all applicable construction standards.
- 2. Conduct pre-job site review to develop a job plan that ensures a safe, efficient job process. A competent person will evaluate difficult sloping and shoring problems (i.e. manholes, etc.) prior to commencing the work.
- 3. Perform inspections of equipment and trench conditions at the start of each shift or as needed by changing conditions.
- 4. Competent person has the duty and responsibility to remove all employees from hazardous condition and effect all changes necessary to ensure safety.
- 5. Categorize soil conditions and conduct visual and manual tests to determine stability of soil and surrounding trench conditions. NOTE: If visual and manual tests are not performed, soils shall be classified as type "C".
- 6. Maintain on-site records of protection systems.
- 7. Determine the appropriate protection system to be used and oversee installation.
- 8. Verify that a competent person designs ramps and walkways for employee use in accordance with OSHA standards.

- 9. Competent person shall verify proper design of structural equipment ramps and walkways, or shall contact a registered professional engineer (RPE) to design structural equipment ramps and walkways.
- 10. Hold tailgate safety meetings with all crew members prior to trenching and shoring operations. Subsequent meeting shall be held as conditions warrant.
- 11. A competent person shall be on-site at all times during excavation/trenching operations.
- 12. Assure that appropriate emergency rescue equipment is available to meet existing or potential conditions.
- 13. Monitor use of water removal equipment.
- 14. Test for oxygen presence and air quality in excavations as necessary. Competent persons shall be trained in identifying confined/hazardous spaces due to the presence of flammable/combustible gases, toxics, oxygen deficiency and oxygen enriched environments.
- 15. Competent person shall consult with RPE for trenches over 20 feet, specially designed shoring bracing or underpinning or when excavation endangers nearby structures.

NOTE: Competent persons shall ensure that all trenches are properly classified, sloped, or shored in accordance with the appendices of 29 CFR 1926- Subpart "P", or in accordance with manufacturer's tabulated data. Furthermore, competent persons shall consult with a RPE obtaining written guidance whenever the work exceeds 20 feet in depth, or the work will require control measures not specified in the standard.

- D. Steps for Determining Soil Classification
  - Visually inspect spoil pile and trench for indication of cohesive or granular soils. If soil appears to be cohesive, conduct plasticity test. If soils are cohesive classify soils by either thumb penetration, shear vane, or pocket penetrometer. If soils do not pass plasticity test, classify granular soils by sedimentation test. NOTE: Other visual and manual tests are authorized in appendix A to 29 CFR 1926- Subpart "P".
  - 2. Determine if soil is cohesive (plasticity test). The following provides a couple of examples for cohesive soil testing:
    - a. Roll or Thread test: Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8 inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch length of 1/8 inch in diameter thread can be held on one end without tearing the soil is cohesive.

NOTE: Only use material passing a No. 40 sieve.

b. Ribbon Test: Form a roll of moist soil about ½ inch to ¾ inch in diameter.

Cohesive material can be successfully rolled into ½ inch to ¾ inch ribbon without crumbling. For example, if at least 3 inches to 5 inches in length can be held on one end without tearing the soil is cohesive.

NOTE: Only use material passing a No. 40 sieve.

c. If plasticity test(s) proves that soils have cohesive qualities, determine the type of soil (A, B, C) by using the following test methods:

NOTE: Soil testing equipment shall be used in accordance with manufacturer's specifications.

i. Thumb penetration (cohesive soils only):

Type "A": ¼ inch or less Type "B": ¼ inch to 1 inch Type "C": 1 inch or more

- ii. Determining Shear Strength (cohesive soils only): By using a hand held vane shear device, the soil condition for cohesive soils can be determined. The following provides an example of the application of the vane shear:
- iii. Determining unconfined compressive strength (cohesive soils only): By using a hand held pocket penetrometer, the soil condition for cohesive soils can be determined. The following provides an example of the application of the pocket penetrometer:
- iv. If soil does not have cohesive qualities (granular soils), use the sedimentation test to determine if soils are a type "B" or "C" soil.

## E. Sedimentation Test

- 1. The Sedimentation Test is the hydrometer analysis adapted for field use. Larger particles are the first to settle out of a soil-water suspension. It is used to determine the amount of sand in a sample taken in the field and is used only on soils that are obviously sands or very sandy. To run the sedimentation test, a representative sample of the soil is taken from the spoil pile. Great care must be taken to ensure that the sample represents the soil in the trench or excavation; otherwise the test will not be accurate.
- 2. The soil sample, after the gravel is removed, needs to be large enough to fill a glass jar to a depth of approximately 1-½ inch. The soil is placed in a tall straight-sided glass jar so that there is at least 5 inches of water on top of the soil. The jar should have a flat bottom and must be at least 6½ inches tall.
- 3. The gravel may be removed by spreading a representative sample of the soil on a flat surface and hand picking the gravel, or by using a number 10 sieve or a piece of 1/8" hardware cloth. The 1/8 inch hardware cloth will pass some of the smaller gravel particles; they will need to be handpicked. All cohesive aggregations must be broken up so that all particles fall as individuals in the soil water suspension. Use clean water for the test. Place the lid on the jar and thoroughly shake the mixture. After the particles have been completely dispersed and the suspension is uniform, set the jar down and give it slight twist. The larger particles will begin to settle out immediately. The twist levels out the

largest particles so that a level surface is generated. All of the sand will have settled out 30 seconds after you set the jar down. Make a mark on the side of the jar. File folder labels work well for marking because they stick well to a damp jar.

- 4. The particles will continue to settle out of the suspension until nearly clear water remains above the layered soil. Most of the silt will have settled out in an hour. Make a second mark. Seldom is it necessary to wait over an hour. This test is good only for those soils that have a very high percentage of sands. The soil must be thoroughly dispersed because any small clods of silt and clay remaining unbroken up will act like sand.
- 5. All soil material below the first mark is sand. The material between the lines is silt and most of the clay. Allowing for the thickness of the glass jar bottom, determine the total height of the soil and the height of the sand. Divide the height of the sand by the total height of the soil and multiply by 100; the result will be the percentage of sand in the sample.
- 6. If the silt-clay mixture settles out rather quickly, mostly silt is indicated. If the suspended solids above the sand settle out slowly, mostly clay is indicated.
- 7. Recall that if silt is the primary fine material present, the soil can be called a loamy sand, even though it has only 70% sand by this test. If clay is the primary fine material, there must be 85% sand to call the material a loamy sand.

Textural Classification - Percentages of sand, silt, and clay. The following chart will aid in soil classification:

		RANGE IN PERCENT		
TEXTURAL NAME	OSHA	SAND	SILT	CLAY
(SOIL CLASS)	SOIL TYPE			
SAND	С	85-100	0-15	0-10
LOAMY SAND	С	70-90	0-30	0-15
SANDY LOAM	В	43-80	0-50	0-20
LOAM	В	23-52	28-50	7-27
SILT LOAM	В	0-50	50-80	0-27
SILT	В	0-20	80-100	0-12
SAND CLAY LOAM	*	45-80	0-28	20-35
CLAY LOAM	*	20-45	15-53	27-40
SILTY CLAY LOAM	*	0-20	40-73	27-40
SANDY CLAY	*	45-65	0-20	35-55
SILTY CLAY	*	0-20	40-60	40-60
CLAY	*	0-45	0-40	40-100

<sup>\*</sup> DENOTES: A, B, OR C DEPENDING UPON UNCONFINED COMPRESSION STRENGTH AND VISUAL INSPECTION OF TRENCH/EXCAVATION.

NOTE: As a general rule of thumb, you can classify 80% sand or greater as a type "C" soil.

- F. Hazard Identification and Control
  - 1. Surface Encumbrances

All equipment, materials, supplies, permanent installations (e.g. buildings, roadways), trees, brush, boulders, and other objects at the surface that could present a hazard to employees working in the excavation must be removed or supported, as necessary, to protect employees.

## 2. Underground Installations

The location of sewer, telephone, fuel, electric, and water lines as well as any other underground installations that may be encountered during excavation work must be located and marked prior to opening the excavation. The Competent Person must make arrangements as necessary with the appropriate utility agency for the protection, removal, shutdown, or relocation of underground installations.

If it is not possible to establish the exact location of underground installations, the work may proceed with caution provided detection equipment or other safe and acceptable means (e.g. using hand tools) are used to locate the utility as the excavation is opened and each underground installation is approached.

Excavation work will be conducted in a manner that does not endanger underground installations or employees engaged in the work. Utilities left in place must be protected by barricades, shoring, suspension, or other means as necessary to protect employees.

#### 3. Access And Egress

Stairs, ladders, or ramps must be provided where employees are required to enter trench excavations four feet or more in depth. Stairs, ladders, and ramps, where used, will be in accordance with the Stairways and Ladders Program. The maximum distance of travel in an excavation to a means of egress will not exceed 25 feet.

## 4. Vehicular Traffic

Employees exposed to vehicular traffic must be provided with, and will wear warning vests or other suitable garments marked with or made of reflectorized or high-visibility material. Warning vests worn by flag persons must be red or orange and be of reflectorized material if worn during night work.

#### 5. Falling Loads

No employee will be permitted underneath loads handled by lifting or digging equipment. Employees will be required to stand away from any vehicle being loaded or unloaded. Vehicle operators may remain in the cabs of vehicles being loaded or unloaded when the vehicle provides adequate protection for the operator during loading and unloading operations.

## 6. Mobile Equipment

When mobile equipment is operated adjacent to the edge of an excavation, a warning system will be used when the operator does not have a clear and direct view of the edge of the excavation. The warning system must consist of barricades, hand or mechanical signals, or stop logs. If possible, the surface grade will slope away from the excavation.

#### 7. Hazardous Atmospheres

Atmospheric testing must be conducted in excavations over four feet deep where hazardous atmospheres could reasonably be expected to exist (e.g. landfill areas, near

hazardous substance storage, gas pipelines).

Adequate precautions will be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen or other hazardous atmospheres. These precautions include providing appropriate respiratory protection or forced ventilation. Forced ventilation or other effective means will be used to prevent exposure to an atmosphere containing a flammable gas in excess of 10 percent of the lower flammable limit. Where needed, respiratory protection will be used in accordance with the Respiratory Protection Program.

Atmospheric monitoring will be performed using a properly calibrated direct reading instrument with audible and visual alarms. Monitoring will be continuous where controls are used to reduce the level of atmospheric contaminants. Monitors will be maintained and calibrated in accordance with manufacturer's specifications.

#### 8. Water Accumulation

Employees will not work in excavations that contain or are accumulating water unless precautions have been taken to protect employees from hazards posed by water accumulation. The precautions taken could include, for example, special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of safety harnesses and lifelines.

If water is controlled or prevented from accumulating by the use of water removal equipment, a person trained in the use of the equipment must monitor the water removal equipment and operation.

If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means will be used to prevent surface water from entering the excavation. Precautions will also be taken to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains must be re-inspected by the Project Manager to determine if additional precautions should be taken.

#### G. Adiacent Structures

Support systems (such as shoring, bracing, or underpinning) will be used to assure the stability of structures and the protection of employees where excavation operations could affect the stability of adjoining buildings, walls, or other structures.

Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees will not be permitted except when:

- A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure; or
- 2. The excavation is in stable rock; or
- A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or
- 4. A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.

Sidewalks, pavements and appurtenant structures will not be undermined unless a support system or other method of protection is provided to protect employees from the possible collapse of such structures.

Where review or approval of a support system by a registered professional engineer is required, the Village will secure this review and approval in writing before the work is begun.

## 5. Loose Rock or Soil

Adequate protection must be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection will consist of:

- a. Scaling to remove loose material;
- b. Installation of protective barricades, such as wire mesh or timber, at appropriate intervals on the face of the slope to stop and contain falling material; or
- c. Benching sufficient to contain falling material.

Excavation personnel will not be permitted to work above one another where the danger of falling rock or earth exists.

Employees must be protected from excavated materials, equipment or other materials that could pose a hazard by falling or rolling into excavations.

- d. Protection will be provided by keeping such materials or equipment at least 2 feet from the edge of excavations, by the use of restraining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.
- e. Materials and equipment may, as determined by the competent person, need to be stored further than 2 feet from the edge of the excavation if a hazardous loading condition is created on the face of the excavation.
- f. Materials piled, grouped or stacked near the edge of an excavation must be stable and self-supporting.

#### 6. Fall Protection

Barricades, walkways, lighting and posting must be provided as necessary prior to the start of excavation operations.

Guardrails, fences, or barricades must be provided on excavations adjacent to walkways, driveways, and other pedestrian or vehicle thoroughfares. Warning lights or other illumination must be maintained as necessary for the safety of the public and employees from sunset to sunrise.

Wells, holes, pits, shafts, and all similar excavations must be effectively barricaded or covered and posted as necessary to prevent unauthorized access. All temporary excavations of this type will be backfilled as soon as possible.

Walkways or bridges protected by standard guardrails must be provided where employees

and the general public are permitted to cross over excavations. Where workers in the excavation may pass under these walkways or bridges, a standard guardrail and toe board must be used.

#### H. Competent Person Documentation

Competent person shall maintain the Daily Inspection Checklist for each trench/excavation. The documentation shall include Job Site Description; Trench/Excavation Inspection Comments; Employee & Public Safety Inspection; Protection System Selected; Soil Conditions; and Construction Design and Comments.

Competent persons for trenching and excavation work shall be trained in the following objectives:

- 1. Define Selected Terminology: Competent persons shall be knowledgeable in the following terms:
  - a. Support system
  - b. Trench
  - c. Excavation
  - d. RPE
  - e. Trench shield/box
  - f. Sloping
  - g. Hydraulic shoring
  - h. Protective system
  - i. Uprights
  - i. Failure
- 2. Identify Duties of "Competent Person" Using Daily Inspection Checklist: Competent persons shall be knowledgeable in the elements of the Daily Inspection Checklist to identify duties.
- 3. Document Trenches/Excavations Using the Daily Inspection Checklist: Competent persons shall be trained to complete the checklist identifying the Job Site

Description; Trench/Excavation Inspection Comments; Employee & Public Safety Inspection; Protection System Selected; Soil Conditions; and Construction Design and Comments.

- 4. Define Selected Soil Terminology: Competent person shall be able to identify the following soil conditions:
  - a. Fissures
  - b. Granular
  - c. Saturated

- d. Clay
- e. Multiple soil types
- f. Moist soil
- g. Caliche
- h. Cohesive
- i. Plastic
- 5. Hands-on Soil Testing: Competent person training shall include hands on soil classification. Competent person training shall require competent person candidate to classify cohesive (clay) soil (commercial clay or play dough may be used as a substitute), and granular soils.
- 6. Interpret Descriptions of Soil Conditions and Identify Types Requiring Shoring: Competent persons shall be able to identify conditions that will affect soil classifications, such as: fissures, vibration, previous excavations, blasting, above water table, rock above soil layers, layers tilting in at 4:1 slope or steeper, water freely seeping from side of trench, etc.
- 7. Identify Causes of Trench Cave-ins: Competent person shall be able to identify cause of trench cave-in, such as: inadequate support systems, inadequate sloping, surcharge loading, etc.
- 8. Identify Hydraulic Shoring Requirements: Competent person shall be knowledgeable in the manufacturer's tabulated data, as well as the application of Appendix D to Subpart p (29 CFR 1926). Competent persons shall be able to identify proper installation techniques and limitation of hydraulic shoring, depending upon the depth and soil type. Competent person shall know:
  - a. Maximum horizontal distances between shores,
  - b. Distance from the top cylinder to soil's top edge,
  - c. Maximum trench width and depth allowed without consulting an RPE,
  - d. Thickness of Finn Form Sheeting for Type "B" soil,
  - e. Number of inches the Finn Form Sheeting should extend above the vertical side of a compound trench and,
  - f. The amount the sheeting may be raised from the bottom of the trench, provided the first cylinder is not higher than 4 feet from the trench floor to the middle of the first cylinder.
- 9. Identify Technical Changes in Sloping and Benching Specification and Recognize Sloping Requirements: Competent person shall be able to identify the slope required for the following soil classifications:

- a. A short term less than 24 hours
- b. A long term
- c. B long term
- d. C long term

In addition, competent persons shall be able to determine when benching is authorized for cohesive soils only.

- 10. Identify Safety Requirements for Using a Trench Shield: Competent person shall be able to identify when end plates are required, how to safely stack shield sections, access and egress requirements, shield construction requirements, material handling requirements (tag line, sling safety, etc.), and lateral support requirements.
- 11. Identify Safety Requirements for a Trench with Surface Encumbrances: Competent person shall be able to identify appropriate methods in bracing or removing surface encumbrances, including when such bracing should be designed by an RPE.

At the completion of the above training, competent person candidates will demonstrate their proficiency under the supervision of competent Authority officials prior to being designated as a "competent person" for trenching and excavation work.

## I. Training

All personnel involved in excavation work must be trained in accordance with the requirements of this section. Training must be provided before the employee is assigned duties.

Retraining will be provided the lesser of every three years or as necessary to maintain knowledge or skills to safely work within or in the vicinity of excavations.

Site Worker

Personnel who conduct work within or in the vicinity of excavations must receive training prior to beginning work at the site. The training must include:

- Requirements of the OSHA Excavations standard;
- Work practices;
- Hazards relating to excavation work;
- Methods of protection for excavation hazards;
- Use of Personal Protective Equipment;
- Procedures regarding hazardous atmospheres;

Emergency and non-entry rescue procedures.

#### Competent Person

In addition to site worker training, a job site competent person must also receive training to include:

- Methods of evaluating the site and conducting inspections according to this section;
- Evaluation and selection of protection methods;
- Ensuring compliance with this section;
- Requirements under additional applicable policies such as Confined Space and Fall Protection.

#### J. Retraining

When the Village has reason to believe that an employee lacks the skill or understanding needed for safe work involving trenching or excavating, management shall ensure that such employee is retrained so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

- Where changes at the jobsite present a hazard about which an employee has not been previously trained; or
- Where inadequacies in an affected employee's knowledge or skills indicate that the employee has not retained the requisite proficiency.

#### <u>SECTION 11.0 - MOTOR VEHICLE DRIVING POLICY</u>

## A. Purpose

Operating motor vehicles is essential to the Authority operations. Vehicle operation skills and safe driving practices ensure that health and public property are preserved. The safety of Authority employees and the general public is the primary emphasis of this policy. This priority will be reflected in all decisions and determinations made under this policy. This policy ensures that Authority employees, required to drive Authority-owned vehicles, meet the Authority driving standards as set forth in this policy and are in compliance with state and local laws. This is not a disciplinary policy; it does not impose discipline but rather establishes the standards used to determine what qualifies/disqualifies an employee to perform driving duties for the Authority.

## B. Responsibility

Division Directors shall ensure that their staff follows the requirements set forth in this policy. Compliance with this policy is the responsibility of all Authority employees.

#### C. Definitions

- 1. <u>Driving Duties</u>: Job functions that require operation of a motor vehicle, whether or not operated on a roadway.
- 2. <u>Driving Improvement Plan</u>: Training provided by qualified Authority staff or third party. Training should include a video and class discussion followed with a short test. All training will be signed off by the employee and their supervisor.
- 3. <u>Employee</u>: A person employed by the Authority to conduct official business.
- 4. <u>Major Violation</u>: Conviction of a motor-vehicle-related offense that is considered a misdemeanor or felony or that could result in revocation or suspension of driving privileges. Driving while impaired, reckless driving, and driving without a valid license are some examples; not limited to Authority vehicles and/or Authority business.
- 5. <u>Motor Vehicle</u>: Means a vehicle which is self-propelled except a vehicle moved by human or animal power.
- 6. Motor Vehicle Accident/Incident (MVA): Any unintended contact between a motor vehicle owned by the Authority or operated by an Authority employee during the course of duty and any other motor vehicle, any fixed or moving object, any person, or any animal where there is any damage or suspected damage to the vehicle or the object contacted, or any injury to a person or animal. This includes unintended contact with road surface or surrounding public works, terrain or body of water, such as sliding into a ditch or temporary physical barrier.
- 7. <u>Motor Vehicle Record Review (MVRR)</u>: A periodic review of the employee's New York State Department of Motor Vehicles driving record.
- 8. <u>Moving Violation</u>: Conviction of a state law or ordinance while vehicle is actually moving, but excluding no registration, no proof of insurance, or failure to change address and not limited to Authority vehicles and/or Authority business.
- 9. Preventable Accident: One in which the driver failed to do everything that reasonably could have been done to avoid the accident as defined in A Guide to Determine Accident Preventability, published by the National Safety Council at (<a href="https://webnew.ped.state.nm.us/wp-content/uploads/2017/12/STB">https://webnew.ped.state.nm.us/wp-content/uploads/2017/12/STB</a> Formula-and-Related-Forms adjudicate-bus-accident.pdf. Preventable accidents include, but are not limited to:

Speed not reasonable or prudent for road conditions; Unsafe backing; Reckless driving resulting in vehicle accident involving one or more vehicles; Vehicle accident resulting from improper cell phone usage.

- Non-Preventable Accident: Non-preventable accidents include, but are not limited to: Vehicle accident involving one or more vehicles with no operator negligence; Accidents involving wildlife (deer, etc.); Accidents that operator has no control over.
- 11. <u>Required Driver</u>: Job Classifications in which driving is an integral or necessary function of the position. An employee in this classification would be unqualified to hold the position should they lose their driving privileges or fails to meet Authority driving standards.

# D. Policy

- Employees authorized by their Division Director to drive in the course and scope of their employment shall use Authority owned vehicles when available and practical. Employees permitted to occasionally drive privately owned vehicles on Authority business must, in addition to other applicable requirements of this policy, ensure that statutorily required insurance, inspection and registration for their privately owned vehicle is valid and current.
- 2. A Motor Vehicle Record Review (MVRR) must be conducted on all employees before they are assigned driving duties. Upon notice from HR that an employee is approved to drive Authority owned vehicles, the Division Director or his or her designee will ensure that each employee is familiar with the features of specific Authority vehicles before the employee is assigned driving duties.
- 3. While driving on Authority business, Authority employees shall obey all state and local laws including proper seat belt usage, cell phone usage, etc.; and make every effort to fully concentrate on vehicle operation. Smoking in Authority vehicles is prohibited.
- 4. MVAs that occur while an employee is driving on Authority business must be reported to their Supervisor and HR immediately so that they may be investigated promptly. These accidents/incidents will be reviewed by the Safety Committee to determine whether the accident was preventable or non-preventable.
- 5. Any motor vehicle conviction, involving the Authority employee that is assigned driving duties, must be reported to the employee's Supervisor within ten working days of conviction. To clarify, reporting includes convictions for personal or work-related moving violations regardless of whether the employee was functioning in an Authority related capacity at the time of the incident. Employees are required to immediately advise their supervisor of an administrative and/or court suspension, revocation

or withdrawal of their driver's license.

#### E. Procedure

#### Motor Vehicle Record Review

- a. At the time of interview for employment, applicants will be required to produce a current driver's license. MVR will be obtained and reviewed by HR prior to an employment offer.
- b. Employees assigned to perform driving duties for the Authority must be authorized by the Authority to obtain copies of MVRs in accordance with this policy.
- c. Periodically, but not less than once per calendar year and/or upon reports of accidents/incidents, HR will obtain and review MVRs for the prior three-year period.

# 2. Motor Vehicle Operations Standards

- a. The following motor vehicle operation standards are used to determine driver eligibility. The motor vehicle operations standards address the insurability requirements and are not intended to usurp or circumvent any disciplinary actions that may arise from violations/accidents/incidents.
- b. No employee shall perform driving duties for the Authority unless they have a valid driver's license. Individuals who fail to maintain these standards are unqualified to perform driving duties for the Authority depending upon the job classification of the driver, the inability to perform driving duties may result in employment action.

#### c. Pre-hire

Applicants for positions that require driving duties may not be considered for employment if within the past three years the applicant was convicted of more than 3 Moving Violations, or consistent with NYS limits; or one or more major violation(s).

# d. Current employees

Employees may not be eligible to perform Driving Duties if within the past three years, counted from the conviction date specified on the MVR, the employee was:

- 1. Convicted of three or more Moving Violations; or
- 2. Convicted of one or more Major Violation(s); or

3. Determined to have three Preventable Accidents while performing duties in the course and scope of their Authority employment and where a disciplinary suspension was imposed for one or more of the Preventable Accidents.

# 3. Driving Improvement Plan

- a. The intent of the Driving Improvement Plan is to provide a mechanism to correct deficiencies by providing training or achieving a period without further violations or preventable MVAs. In addition, it will serve as notice to current employees that they are at risk of failing to meet the Motor Vehicle Operations Standards. Employees participating in the Driving Improvement Plan are still required to meet the Motor Vehicle Operations Standards.
- b. An employee will be placed on a Driving Improvement Plan if, during the three-year period immediately preceding the review, the driver:
  - 1. Was convicted of a total of two Moving Violations; or
  - Was found responsible for a total of two preventable accidents while performing driving duties in the course and scope of their Authority employment.
- c. The Division Director will notify the employee in writing of their required participation and placement on a Driving Improvement Plan.
- d. The Division Director, in conjunction with HR and the EHSE, will identify the appropriate training and direct the employee placed on the Driving Improvement Plan to complete training or other remedial activity to improve driving skills and performance as necessary or deemed appropriate.
- e. An employee may be removed from active participation from the Driving Improvement Plan upon successful completion of the appropriate training identified by the Division Director, with the concurrence of the Safety Committee.
- 4. Reporting Motor Vehicles Accidents/Incidents (MVAs)
  - a. In addition to following all laws regarding reporting of MVAs, employees performing driving duties must report all MVAs or damage to Authority property occurring in the course and scope of employment to their supervisor or Division Director from the scene of the accident, if possible, or as soon as practical, but no later than the end of the business day of the MVA, unless prevented by the driver's own injury. Initial reporting may be by radio, telephone or in person.

# F. Disciplinary Actions

This section is intended to provide general guidelines for employee discipline for driving related accidents that occur while employees are performing Authority related driving duties so that incidents are handled consistently within the Authority.

Accidents will be reviewed by the Safety Committee in accordance with this Policy and the Health and Safety Manual. Employees involved in accidents that are determined by the Committee to be preventable may be subject to disciplinary action. Discipline is dependent on the severity of the accident, and the employee's accident history, and may include mandatory attendance at a Committee Meeting, reprimand memo placed in employee's personnel file, suspension from work without pay, completion of Driving Improvement Plan, or termination. Decisions regarding disciplinary action shall be rendered by the Executive Director.

# SECTION 12.0 CONSTRUCTION PROJECT MANAGEMENT ENVIRONMENTAL HEALTH & SAFETY REQUIREMENTS

# A. Purpose

The purpose of this section is to describe the process and requirements for managing all Authority construction projects in accordance with environmental, health and safety (EH&S) requirements. This process was developed to ensure that all projects are reviewed for potential EH&S issues early on in the development of the scope of work to identify potential compliance and safety issues. By following this process EH&S considerations will be incorporated into the construction projects prior to the start of work. This document informs interested persons, including employees, that our facility has developed a procedure to transmit safety and environmental information from the company to contractors and their workers and from contractors to this company. This procedure standardizes information transfer to ensure that all concerned have the information they need to work safely and to minimize impacts to the environment.

# B. Scope

This document is intended to be used as a job aid for Authority personnel that are overseeing construction projects. The worksheets, safe work practices, safety and environmental rules and policies contained in this document are **not** all inclusive. The Authority expects all contractors, subcontractors and their employees to strictly follow all safety standards as outlined in OSHA 29 CFR 1926 for the construction industry and all applicable environmental requirements. In addition, other federal, state and local laws may apply to which the contractor will be held accountable.

#### C. Definitions

#### 1. Construction Contractor/Subcontractor

For purposes of this procedure, "Construction Contractor" means work for construction, alteration, and/or repairs, including painting and decorating by independent person(s) or agencies not affiliated with the Authority.

# 2. Construction Project

Construction projects are defined as any project that involves either internal or external activities related to the renovation, rehabilitation or building of new facilities or infrastructure, regardless of the dollar value of the project.

# 3. Project Manager

For purposes of this procedure, the Project Manager (PM) is defined as an Authority employee that is responsible for overseeing the project. The project manager is responsible for communicating all known safety, health, and environmental issues to the contractor or contractor's designated safety representative. The same requirements apply if the project is being performed by Authority staff. The PM will have a copy of this work document, be thoroughly familiar with its contents, and with the safety, health, and environmental aspects of the work, or know who to call to obtain this information. The PM is responsible for ensuring that all responsibilities outlined in this procedure are carried out.

All Authority projects will be assigned to an internal employee to manage and oversee. This employee will be referred to as the Project Manager (PM). The PM is responsible for reviewing the scope of work and evaluating potential environmental, health and safety impacts in accordance with the Environmental & Safety Assessment Form included in this document. The PM is encouraged to consult with internal or external experts if they are uncertain how the impending project will affect various EH&S matters. The Division Manager is responsible for reviewing the E&S Assessment Form for thoroughness and ensuring that an appropriate project plan has been developed.

#### 4. Division Director

The Division Director where the work will be performed is responsible for reviewing the ESAF for thoroughness and ensuring that an appropriate project plan has been developed. They are also responsible for ensuring that the PM completes the necessary oversight of the project through closeout.

# 5. Environmental, Health, & Safety Engineer

The EHSE, serving as the Authority's environmental compliance and safety specialist will provide assistance, upon request, in the preparation of any related ESAFs, Project Plans or bid documents. The EHSE will review each ESAF.

# 6. Chief Operating Officer

The COO, serving as the Authority's Certified Safety Professional, will review each ESAF and provide consultation to the division directors.

#### D. Process Overview

# 1. Environmental & Safety Assessment (Prior to Bid)

Once the scope of work for the project is developed, the PM is responsible for completing the Environmental & Safety Assessment Form (ESAF) in OnBase. To complete this form, the PM will require an in-depth knowledge of the project scope and standard construction practices. Although some means and methods may not be known until the contract is bid, the PM should use their judgment to complete the checklist in advance of finalizing contract documents. This is necessary because some elements of the ESAF may need to be incorporated into the bid documents. For example, if a project requires confined space entry, asbestos abatement, removal of petroleum bulk storage tanks, or other specific safety or environmental related work, then the bid documents should identify these requirements up front. Submittal of safety plans and training certificates may be required as part of the contractor's bid or notification to regulatory agencies may be necessary prior to certain task being completed by the contractor. The results of the ESA will be incorporated into a Project Plan that will document how the affected EH&S issues will be addressed and managed during the project.

#### 2. Procurement

Each Authority procurement involving EH&S related work shall require the completion of the ESAF. Project Managers are required to ensure that the ESAF is completed prior to releasing a procurement involving EH&S related work. Environmental, Health and Safety concerns identified on the ESAF shall be incorporated into the bid documents. The Authority will not identify means and methods for addressing each known Environmental, Health & Safety concern identified. The Procurement Coordinator will verify completion of such form during review.

# 3. Evaluation of Contractor (Prior to Award)

Projects that involve EH&S related work shall consider the qualifications of the contractors performing the work. As stated in this section, it is preferable to identify specific safety requirements up front in bid documents and require that contracts supply this information as part of their bid to ensure they meet our minimum requirements for qualification.

# 4. Review with Contractor (Prior to Notice to Proceed)

After the contract is awarded and prior to the start of any construction activities, the PM will conduct a pre-construction meeting/walkthrough and document results on Form 7, Form 8, and Form 9 will be reviewed with the contractor and a copy maintained on file.

- a. The pre-construction meeting with the contractor or Authority personnel completing the project is intended to review the project and communicate safety and environmental related matters such as:
  - Site specific safety and environmental rules and procedures
  - Project specific safety and environmental requirements (from Project Plan)
- b. The site-specific walkthrough with the contractor or Authority personnel completing the project is intended to communicate:
  - Safety and health hazards
  - Environmental concerns and policies
  - Emergency communication protocol
  - Location of nearest exit (if applicable)
  - Directions to the employee emergency evacuation rally point
  - Location of fire extinguishers (if applicable)
  - Location of the nearest alarm boxes (if applicable)
  - Location of the nearest eyewash/safety shower station
  - Specific personal protective equipment requirements
    - a. Anticipating the possible safety hazards created by:
    - b. Excavations, trenching
    - c. Material handling and storage
    - d. High energy sources such as overhead power lines, natural gas lines and steam
    - e. Other project related work
- c. The PM will ensure that all affected employees at the Authority have received training and/or communications on hazards to which they may be exposed by a contractor's work activities. Suggested methods of communication and training include:
  - Providing necessary information to supervisors for the purpose of training or communicating with affected employees concerning new hazardous chemicals, (SDS) or specific hazards introduced by the contractor's presence; and/or;
  - Placement of warning signs and or access barriers to the work site.

## E. In Construction Tasks

On a periodic basis the PM will:

 Review safety requirements with the contractor or the contractor's designated safety representative.

- Tour the project site and observe safety protocol. Determine if the contractor or internal personnel are following Authority environmental and safety requirements. Some possible things to look for include:
  - 1. Is the job site barricaded to protect personnel from the dangers of the construction site?
  - 2. Is equipment properly locked out?
  - 3. Are contractors wearing necessary protective equipment (i.e., safety shoes, safety glasses, hearing protection)?
  - 4. Do contractors know what to do in case of emergency?
  - 5. Are hot work permits being followed, if applicable?
  - 6. If work overhead is being performed, are hard hats being worn and is the area barricaded to prevent employees from entering work space below?
  - 7. Are gas cylinders properly stored?
  - 8. Are all chemicals stored properly (labeled, no leaks or spills)?
- Direct contractor or Authority personnel to immediately correct any unsafe conditions observed.
- Keep the Division Director informed of any injuries, incidents, or other safety related activity during the project; as well as any spills, releases, or potentially hazardous waste generation.

# F. Project Closure

At the conclusion of the project, the PM will complete a "Project Closure Assessment" (Form 10).

## G. Authorization to Stop Work

The PM is authorized to remove the contractor and/or contractor employees from a job at any time if not satisfied or concerned with their safety or environmental performance. The PM will notify the Contractor of any unsafe condition(s) observed during inspections and/or audits. If the Contractor's supervisor cannot be found, and the unsafe condition is of urgent matter, the PM is authorized to stop all work-related activities.

## **SECTION 13.0 GENERAL OFFICE SAFETY**

#### A. Introduction

The protection of employee health and safety is of utmost importance to the Authority. It extends to all work areas, including office space. This section outlines safety and health guidelines for all Authority office areas. Employees are expected to maintain office and administrative spaces in a safe condition. Any unsafe conditions noted during normal work activities must be reported to a supervisor for correction.

#### B. Office Environment

The following office conditions will be maintained:

- 1. Unobstructed stairways.
- 2. Handrails on stairs, firmly attached.
- 3. Carpets, if applicable, free of tears, lumps, and loose pieces.
- 4. All equipment guards shall be maintained in original, working condition.
- 5. Extension cords should not be used unless absolutely necessary and as temporary power until a permanent outlet is provided.
- 6. All equipment connected with 3-prong plugs.
- 7. All electrical outlet face plate covers shall be in place and in good condition.
- 8. Exits and emergency exit procedures well marked.
- 9. Fire extinguishers in place and operative.
- 10. Bookcases and shelves secured.
- 11. Illumination adequate (replace bulbs & clean fixtures).
- 12. Ventilation adequate (maintain grills & filters to provide uninterrupted air flow).

# C. Safe Work Practices

- 1. No water, oil, soap, or excess wax on floor.
- 2. Standing on chairs or boxes is prohibited.
- 3. Office machine cords are to be kept out of aisles and work areas to prevent tripping, unless encased by floor molding.
- 4. Aisles are to be kept clear of obstructions.
- 5. Broken or splintered chairs will be removed from use and replaced.
- 6. Running in aisles or stairwells is prohibited.
- 7. Lifting or moving bulky or heavy equipment materials alone is prohibited. Obtain assistance.
- 8. Lift with legs, not back, to prevent back injuries.

- 9. Caution must be used in operating paper cutters, trimmers, and power punches. Keep fingers clear of the cutting blades. Blades of paper cutter must not be left open after use.
- 10. Filing cabinets and desk drawers will be closed when not being accessed.
- 11. Contents of filing cabinets will be arranged so as not to over balance the cabinet. Contents will be distributed through the entire cabinet rather than the top drawer.
- 12. Chairs will be adjusted so that thighs are horizontal, feet rest flat, and arms are comfortable. A footrest may be needed to achieve this posture.
- 13. Chair backrests will be utilized to support the lower back and fit the curvature of the spine.
- 14. Display screens will be positioned to minimize glare and reflections from overhead lights. Glare screens are available to aid in reducing glare.
- 15. Display screen will be positioned so top is slightly above eye level when seated.
- 16. Screen contrast or brightness control will be set at a comfortable level.
- 17. Heavy objects will be stored on lower shelves.
- 18. Sharp objects will be stored where they can't fall or be handled accidentally.
- 19. A first aid kit will be readily available.
- 20. Emergency phone numbers will be made readily available.

# D. Ergonomics

OSHA has developed industry specific guidelines to provide specific guidance for employers to help minimize the injuries associated with muscular-skeletal disorders (MSDs). Some common examples of MSDs include carpal tunnel syndrome, Raynaud's syndrome, and tendonitis. Employers have an obligation to implement effective programs or other measures to reduce ergonomic hazards and associated MSDs under the General Duty Clause, Section 5(a)(1).

Through risk assessment, engineering controls and proper design of workstations, the risks of encountering MSDs in the workplace can be minimized.

The Authority believes that training employees to be aware of these risks can help them to identify potentially harmful situations before they occur. Periodic training on ergonomics, back-safety, proper lifting and other MSD related topics are offered to all employees.

Periodic ergonomic assessments are performed to identify high-risk work practices. Through these assessments, improvements can be implemented that will reduce the potential for future MSDs to occur.

# **SECTION 14.0 - FORMS**

#### FORM 1 – ACCEPTANCE & ACKNOWLEDGEMENT OF UPDATES FORM

# DEVELOPMENT AUTHORITY OF THE NORTH COUNTRY HEALTH AND SAFETY MANUAL

# FORM 2 – CONFINED SPACE ENTRY PERMIT (Page 1 of 2)

This permit must be posted at confined space during entry. Once entry is complete, this form must be saved here: G:\Safety and Environmental Compliance\Safety\Confined Space\Closed Permits

Call 911 in case of emergency.			
Name of confined space to be entered:			
Date/time space will be entered://: am/pm to	<b>)</b> //	: am/p	m
Purpose of entry:			
List Employees/Contractors entering space Employee signatures required 1.			
Name of Attendant: Verify Emple	oyee has Tra	aining Certifica	ate 🗌
How will communication be maintained with entrants? (radio, line o	f site, other_	)	
Pre-Entry Check: Date/Time:// am	n/pm		
Parameter         Result           1. Oxygen (19.5-23.5%)			
Safety Precautions Necessary Before Entering Space:	Yes	No	NA
1. Were all energized systems locked out prior to entry?  2. Is hot work going to be performed in space? (Attach completed hot work form to this permit)  3. Is respiratory protection necessary?  4. If respirator is required, what type of respirator will be used?  5. Is mechanical ventilation necessary / required?  Mechanical ventilation is always required at the MMF			
6. Is entry over 5 feet vertical depth?  - If Yes, harness and emergency retrieval equipment are required - If No, full body harness and tie rope are required  7. Is lighting required and utilized? If so, it must be explosion proof			

# FORM 2 - CONFINED SPACE ENTRY PERMIT (Page 2 of 2)

Gas Tester Name and Serial Number:  MMF Industrial Scientific MX4 SN: 230533P-002  MMF Industrial Scientific MX4 SN: 24123E2-002  WQ Industrial Scientific MX4, SN: 210626D-001  WQ Industrial Scientific MX4, SN: 14082MN-001  WQ Industrial Scientific MX4, SN: 241237D-002  WQ Carthage WPCF MSA Altair 5X, SN: 00005449  WQ Carthage WPCF MSA Altair 5X SN: 00014532				
Continuous Atmospheric Testi upon completion of work)  Testers Initials Time 1. Oxygen (19.5-23.5%)	ng Results (Record	every 2 hours; Place : am/pm %	e X through boxes  : am/pm %	that are not used  : am/pm %
2. Hydrogen Sulfide (<10ppm) 3. CO (<35 ppm) 4. LEL (<10%)				
I have reviewed the work authorized by this permit and the information contained herein. Instructions and safety procedures have been received and are understood. Entry is not approved if any blocks in the preentry checklist are <b>not</b> checked or if LEL is above 10%. If gas levels are not within permissible limits, Self-Contained Breathing Apparatus must be used.  Entry Permit Supervisor:				
The list of current qualified Confined Space Supervisors is listed above in the Confined Space Rescue section of this manual.  After completion of confined space entry, this permit will be returned to Admin and kept on file for 1 year.				
This confined space entry permit has been canceled.				
Permit Entry Supervisor Name	Signature	· · · · · · · · · · · · · · · · · · ·		Date

# **FORM 3 – HOT WORK PERMIT**

Description of Work to Be Performed	
Location where work is being performed	
Will work be done in any areas where chlorine	
gas is used? (Warneck Pump Station)	
Time and date of work to be performed	
Name of Authority employee or contractor	
performing the work	
5. Type of Hot Work Performed	<ul> <li>☐ Cutting/Mechanical</li> <li>☐ Cutting/Torch</li> <li>☐ Brazing</li> <li>☐ Soldering</li> <li>☐ Grinding/Mechanical</li> <li>☐ Welding (if checked, list weldment &amp; type)</li> </ul>
6. List Type of Material/Metal that Hot Work is	Stainless Steel
being performed on	Ductile Iron
	Carbon Steel
	Galvanized Steel
	(Written Mgr. approval must be attached)
	Aluminum
	Copper Other:
7. Name of fire watch that will be present during	Other.
work.	
8. Is the fire watch trained on hot work procedures	☐ Yes
and how to use the extinguisher?	□ No – Work Cannot Proceed
9. Is there overhead work?	Yes – List precautions
	☐ No
10. Have any portable combustible materials been	Yes
relocated prior to the start of work?	∐ No
11. Has protective covering been used?	Yes – Where & What Type:
	□ No
40. To a of the costing wish on a position of and a collection	
Type of fire extinguisher required and available at hot work area	ABC B C D
13. Describe any special precautions needed for	
floors, walls, ceilings, roof or atmosphere (if	
flammable gases present)	None
14. Name of supervisor that has been trained on hot	Name:
work procedures and has inspected the area	Ciaratura
prior to the start of work	Signature:
15. Has equipment being used been inspected for	Yes
damage prior to start of work?  16. Time that hot work is completed	☐ No
17. Name and signature of employee that inspects	Name:
the hot work area 30 minutes after the last hot	Signature:
work is completed	Date and Time:

# FORM 4 - HEALTH & SAFETY INSPECTION FORM

Name of Person Completing Inspection:	
Date of Inspection:	
Location of Inspection:	
	Page 1 of 3

INSPECTION ITEMS  1. Inspect active cell at MMF for proper use of high visibility PPE.	Not Insp.	No Further Action	Action	Main Office	WQ Facilities	X
(Observe at least 3 trucks) Comments:						A
2. Observe employee transferring chemicals (i.e., chlorine, defoamer, electrolyte, parts cleaners) to ensure PPE is being used Comments:					X	X
3. Check a Hearing Protection Required Area to see if employees are using PPE: Reference section 3.4 of H&S manual. Comments:					X	X
4. Check for proper Safety Shoes: reference section 5.1 of H&S Manual Comments:					X	X
5. Inspect maintenance shop or other work areas for housekeeping (Flammable storage, tripping hazards, unsafe material stacking) Comments:				X	X	X
6. Inspect maintenance shop or other work areas for protective light fixture lenses (minimizes light fixture glass shattering) Comments:					X	X
7. Check for properly stored compressed gas cylinders (cylinders must be secured to wall with caps installed & stored separate from other gas cylinder)  Comments:					X	X
8. Inspect power tool cords for proper grounding, frayed cords, and guarding. (Hand grinders, drill presses, hand drills, bench grinders etc.) Comments:					X	X
9. Check for proper usage of ground fault circuit interrupters in wet areas Comments:					X	X
10. Check that electrical panels are unobstructed (48" clearance) Comments:					X	X
11. Check emergency exit lights Comments:					X	X
12. Check Emergency lighting for proper operation Comments:					X	X
13. Check exit routes are clear of any obstructions Comments:				X	X	X

Page 2 of 3						
INSPECTION ITEMS	Not Insp.	No Further Action	Action	Main Office	WQ Facilities	MMF
14. Check for posted emergency evacuation maps Comments:				X	X	X
15. Check samplings of fire extinguishers to ensure monthly inspections are being completed & documented on tag Comments:					X	X
16. Check eye wash stations to ensure weekly inspections are being completed & documented on tag Comments:					X	X
17. Inspect harnesses for general housekeeping practices (proper storage, deformed snaps, frayed webbing, etc.) Comments:					X	X
18. Observe Confined Space signage Comments:					Х	Χ
19. Observe active lock-out /tag-outs are being completed properly Comments:					Х	Χ
20. If hot work is being performed during inspection review copy of permit Comments:					Х	X
21. Ask employees some general questions concerning safety: SDS's; Confined Space; Emergency Evacuation; Hot Work, etc. Comments:					X	X
22. Spot check use of seatbelts Comments:					Х	Χ
23. Inspect ladders for broken rungs, damaged sides, etc. Reference section 10.3 of H&S Manual Comments:					Х	X
24. Check stair railings and width of stairs. Reference section 10.3 of H&S Manual Comments:					Χ	X
25. Check for posted crane/hoist load ratings. Reference section 9.2 of H&S Manual Comments:					Х	X
26. Check for posted 3E SDS poster (contains emergency phone numbers) Comments:					Χ	X
27. Inspect hazardous materials containers for proper labeling Comments:					X	X

INSPECTION ITEMS	Not Insp.	No Further Action	Action	Main Office	WQ Facilities	ММБ
28. Check for posting of emergency phone list Comments:					Х	
29. Inspect AED unit for properly charged battery, verify pad & Battery expiration dates.  Comments:					X	Х
30. Check to see if first aid supplies are available (inspect first aid supply cabinets)  Comments:				X	X	Х
31. Check for posted PESH SH 900.1 log (log to be posted conspicuously at MMF O&M, Warneck Pump Station & SOB) . Log to be posted by 2/1 for the prior calendar year and removed by 4/30. Comments:				X	X	X
32. Check for posting of Homeland Security signage Comments:					X	
33. Check condition of installed fire/smoke alarms for proper operation Comments:					X	Х

# **FORM 5 - TELECOM SAFETY INSPECTION FORM**

NSPECTOR:	
DATE OF INSPECTION:	
CENTRAL OFFICE:	

INSPECTION ITEMS	Completed	Not Comp.
Inspect all CO entrance doors for functional locks and door frames. Ensure no visible signs of forced entry.		
Inspect all cable entrances to ensure ducts are plugged and no signs of rodent penetration. Spare inner-ducts must also be plugged.		
3. Inspect floors for liquids and cleanliness. Mop and sweep as required.		
4. Inspect all contact alarm points. IE: Door alarm, temp sensors		
5. Visually inspect FM-200 system for defects. Ensure agent gauge indicates proper level.		
6. Inspect Battery terminals for corrosion and ensure Plexiglas cover is present.		
7. Inspect First Aid Kit and ensure items are stocked sufficiently		
8. Inspect eye wash bottle to ensure solution is within shelf life date. Date//. Inspect gloves, eye protection and blankets for excessive wear.		
Inspect step ladder for cracks and unsafe conditions.		
10. Visually inspect electrical sub panels for defects.		
11. Visually inspect communications equipment surfaces and dust as required.		
12. Inspect lighting and change bulbs as required.		
13. Test and Inspect emergency exit lighting.		

<sup>\*</sup> RETURN ALL COMPLETED INSPECTION FORMS TO SAFETY COMMITTEE

### FORM 6 - HEPATITIS AND TETANUS VACCINE ELECTION FORM

I understand that due to my occupational exposure to blood or other potentially infectious materials (OPIM), I may be at risk of acquiring hepatitis A, B or tetanus virus infection.

The Authority has given me the opportunity to be vaccinated at no charge to myself. Furthermore, I am declining the vaccinations as noted below:

HEPA	ATITIS A
0	I decline hepatitis A vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis A, which is 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 A vaccine, I can receive the vaccination series at no charge to me.
0	I have already received the hepatitis A vaccination series.
<b>HEPA</b>	ATITIS B
0	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, which is 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.
0	I have already received the hepatitis B vaccination series.
<b>TETA</b>	<u>NUS</u>
0	I decline tetanus vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring tetanus, which is 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 tetanus vaccine, I can receive the vaccination series at no charge to me.
0	I have already received the tetanus vaccination series.
Emplo	yee's Name (Print)
Date:	

# FORM 7 - PRE-CONSTUCTION MEETING AGENDA

Today's Date:	
Project Name:	
Facility where Work is Being Performed:	
Start Date:	
Planned Completion Date:	
Authority Project Manager:	
Name of Contractor or Authority Dept. Performing Work	
Representative in Charge:	
Representative in Charge:  Phone:  Fax:	
Discussion Items	
<ul> <li>Information Exchange:</li> <li>Overview of Work Plan</li> <li>Project Safety and Environmental Assessment Review</li> <li>Review of Site Safety Rules</li> <li>Review of Contractor Work Practice Rules</li> <li>Emergency Procedures</li> <li>Proposed Site Inspection Schedule</li> <li>Anticipated Work Permits</li> <li>Anticipated PPE</li> <li>Frequency of Safety &amp; Environmental Review Meetings</li> </ul>	
Meeting Notes:	-

### FORM 8 – AUTHORITY CONTRACTOR RULES & RESPONSIBILITIES

Page 1 of 3

## 1.0 <u>Contractor's Responsibilities</u>

Contract employees must perform their work safely. Considering that contractors often perform very specialized and potentially hazardous tasks, such as confined space entry and non-routine repair activities, their work must be controlled. This document is intended to provide supplemental information to contractors working on Authority premises. All contractors are responsible for following all applicable federal, state and local safety protocol.

Prior to beginning work, all contractors working at the Authority facilities are expected to:

- Assure that their employees are trained in the work practices necessary to safely perform the job.
- Instruct employees in the potential fire, explosion, or toxic release hazards associated with this contract.
- Assure the employee knows the applicable provisions of the emergency action plan for medical emergencies, fire, chemical spills, and evacuation.
- Inform employees of applicable safety rules of this facility, particularly those implemented to control the hazards of the contracted process during operations such as Lockout/Tagout, Welding Permits, Confined Space Entry, and Fall Protection.
- Require that all sub-contractors abide by the same rules to which this section binds the contractor.
- Inform employees of applicable environmental rules of the facility to ensure minimal impact on the environment.

### 2.0 General DANC Safety & Environmental Rules

Contractors will follow all applicable safety regulations including but not limited to the following General Authority Safety & Environmental Rules:

- Have a designated site safety representative present and attentive to work crew activities.
- Establish the necessary safe practices to permit safe working conditions for Authority employees and property. (This includes, but is not limited to: barricading, sign posting, and fire watches.)
- Provide employees with medical care and first aid treatment. Authority first aid facilities may be used only in case of emergencies.
- Provide all tools and equipment for the work, including personal protective equipment (PPE).
- Maintain good housekeeping at the work site.
- Follow specific instructions supplied by this company should emergency alarms be activated.
- Notify the Authority Project Manager immediately of any OSHA recordable injury or illness to contractor employees or sub-contractor employees.
- Follow the Authority's written safety policies and procedures specific to the work being performed.

- Use of any Authority owned vehicle is prohibited unless prior approval is granted (fork truck, aerial lifts etc.).
- Use of compressed air for blowing off clothing, hair, face, or hands is strictly forbidden.
- All containers and chemicals not in their original container must be identified with a HMIS label.
- All drop cords, hoses, welding leads, etc., must be elevated to a minimum of seven (7) feet above all pedestrian traffic areas or secured to avoid tripping hazards.
- Ground fault circuit interrupters must be used on all electrical equipment used in confined space entries and in "wet" environments per the National Electric Code.
- Authorized work permits MUST be obtained prior to doing the following:
  - o Cutting/burning/welding or use of sparking tools
  - o Entry of a confined space
- Materials must be secured and properly stored.
- Immediately clean spills and mark any wet or slippery walking or working surfaces.
- Clean work areas of all excess work materials, equipment, and debris on a daily basis.
- Arrange work materials and equipment as to not block aisles, electrical panels or emergency equipment or exits.
- Compressed gas cylinders must be secured, tagged, and have protective caps in place when not in use.
- Ensure that OSHA equipment inspections and inspection reports are maintained.
- Follow the DANC environmental policies and procedures specific to the work being performed as follows:
  - o Avoid discharge of any chemical to plant process or storm drains without prior approval by the Project Coordinator.
  - o Notify the Project Coordinator immediately of any spills or releases to the environment.
  - o Follow the conditions specified in environmental permits, if required.
  - o Handle hazardous waste in accordance with RCRA regulations.
- Qualified DANC employees may provide emergency first aid treatment under the Good Samaritan Act in life threatening situations.

### 3.0 Erosion and Sediment Control Certification:

In accordance with the requirements of the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-17-004, each Contractor performing an activity that involves soil disturbance at the Materials Management Facility shall agree to comply with the Erosion and Sediment Control Plan for that facility. By signing on the following page, the Contractor certifies that they understand and agree to comply with the Erosion and Sediment Control and that is unlawful for any person to cause or contribute to a violation of water quality standards.

## 4.0 <u>Record Keeping Requirements</u>

The contractor is expected to:

• Keep records of all training done with contract workers and all documentation provided to the contracting company regarding such training.

### Page 2 of 3

• Have on file the emergency response procedures outlined in this document.

- Provide copies of all safety data sheets (SDS) or other required information about chemicals relevant to the work on-site prior to beginning work.
- Keep an OSHA recordable injury and illness log for the project, as well as copies of accident reports on all accidents that occur in the course of the project.

I have completely read this document and have a clear understanding of the requirements established for each of the following elements of this plan:

- Contractor Responsibilities
- General Safety & Environmental Rules
- Erosion and Sediment Control Certification
- Record Keeping Requirements

I also understand that I am responsible for following all applicable federal, state and local safety protocol and that the Development Authority of the North Country assumes no liability or responsibility for contractor safety.

Failure to comply with these safety and environmental policies or procedures may result in the immediate disqualification of the present contract and any future contracts with this facility.

Contractor Supervisor	
Name (printed): Date:	Signature:
Contract Employees Working on DA	ANC Project
Name (print)	
Authority Project Manager Signature	e:
Date:	
Page 3 of 3	

### FORM 9- NON-EMPLOYEE ACCIDENT REPORTING FORM

Page 1 of 2

# THIS FORM MUST BE COMPLETED AND RETURNED TO AUTHORITY PROJECT MANAGER WITHIN 24 HOURS OF ACCIDENT AND IS REQUIRED FOR ANY ACCIDENT INVOLVING A CUSTOMER, VENDOR, OR VISITOR.

DATE OF ACCIDENT:		_TIME OF ACCIDENT:		
LOCATION OF ACCIDENT:	☐ MMF (LANDFILL) ☐ STATE OFFICE BU		☐ TELECOM CENTRAL OFFICE	
SPECIFIC AREA WHERE AC OCCURRED:	CCIDENT		_	
TYPE OF ACCIDENT:	☐ VEHICLE	□ NON-V	EHICLE	
DAMAGE INVOLVED?	☐ PROPERTY	PERSC	NAL INJURY	
PERSON(S) INVOLVED IN ACCIDENT:				
DESCRIPTION OF THE ACC	IDENT:			
IF APPLICABLE, BREIFLY ACCIDENT:	DESCRIBE ROAD AT	ND WHET	HER CONDITIONS AT TIME OF	
CONTRACTOR/VENDOR/VI	SITOR'S STATEMENT			
			PREVENT FUTURE RECURRENCE S? IF SO, PLEASE DESCRIBE:	
_				
SIGNATI IDE:		DATE:		

SIGNATURE:	
DATE:	_
DIVISION DIRECTOR'S SIGNATURE:_	
DATE:	

DANC PROJECT MANAGER'S COMMENTS:

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# **FORM 10 - PROJECT CLOSURE FORM**

Page 1 of 2

Prior to closing out the project, the Project Coordinator will complete a Post-Project Closure Assessment on equipment, facilities or processes installed as follows:

Assessment on equipment, facilities or processes installed as follows:  O.K. or N/A						
ITEM	(initials/date)	COMMENTS				
1. Facility	,					
1.1. Exits labeled and accessible						
1.2 Fire extinguishers mounted, visible,						
number assigned (by guard)						
1.3 Walking surfaces safe; guardrails, ladders, stairs per OSHA						
1.4 Eye wash/safety shower installed, labeled with equipment number						
2. Services						
2.1 All piping labeled with contents and direction of flow; color coding correct if done						
2.2 Dead-ended valves capped or plugged						
2.3 Electrical disconnect(s) labeled						
2.4 Feeder circuit breaker(s) labeled						
2.5 Conduits secure and covered						
3. Safety and Environmental						
3.1 Chemical storage proper						
3.2 All chemical containers labeled						
3.3 MSDS on file for every chemical and all chemicals added to inventory						
3.4 Diking in place						
3.5 Noise survey conducted						
3.6 Air quality tested						
3.7 Confined space survey conducted						
3.8 Temporary environmental permits terminated (air, water)						
3.9 Waste (solids, liquids, discharges) disposal proper						
3.10 Special hazards addressed (lasers, radioactivity, etc.)						
3.11 PPE requirements determined; PPE						
3.12 Ergonomic assessment performed						
3.13 Lockout/Tagout reviewed						
3.14 Load capacities for lifting equipment						
3.15 Lifting equipment load tested						

ITEM	O.K. or N/A	COMMENTS
4. Operational		
4.1 All controls labeled		
4.2 Guarding installed, interlocks tested		
4.3 All control sequences tested		
4.4 Alarms tested		
4.5 Machine performs operations per specifications		
4.6 Operator training conducted		
4.7 Maintenance training conducted		
5. Documentation		
5.1 Manuals filed or machine spec complete		
5.2 Drawings submitted to drafting		
5.3 Maintenance equipment number(s) assigned		
5.4 Preventive maintenance scheduled in database		
5.5 Calibration scheduled in database		
5.6 Spare parts request form submitted		
5.7 Software documentation filed		
5.8 SOPs issued		
5.9 Training documents or videos completed		
5.10 Warranties, engineering test reports, other documentation filed		
5.11 Documentation of decorative finishings (paint, stain, moldings) brand and details for future matching		
6. Finance/Procurement		
6.1 If capital project, notify Finance and Procurement when substantial and final completion are issued so project can be closed and new facilities or equipment added to our insurance policy		

DATE:	
-------	--

# FORM 11 – LIST OF RISK AND MITIGATION EFFORTS

Risks Identified through Record Review and/or Risk Evaluation	Methods and means by which the risk is being addressed
Identified Risk#	

#### FORM 12 - WORKPLACE VIOLENCE INCIDENT REPORT

- 1. Date of Incident:
- 2. Time of day/shift when the incident occurred:
- 3. Workplace location where incident occurred:
- 4. Provide a detailed description of the incident below.

**Note:** If the case is a "privacy concern case," remove the name of the employee who was the victim of the workplace violence and enter "PRIVACY CONCERN CASE" in the space normally used for the employee's name. Privacy concern cases include cases involving:

- Injury or illness to an Intimate body part or the reproductive system;
- Injury or illness resulting from a sexual assault;
- Mental illness:
- HIV infection:
- Needle stick injuries and cuts from sharp objects that are or may be contaminated with another person 's blood or other potentially infectious material; and
- Other injuries or illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the report.

### **DESCRIPTION** (include the following):

- Name of employee reporting the incident (unless a "privacy concern case");
- Names and job titles of involved employees;
- Name or other identifier of other individuals involved; Nature and extent of injuries arising from the incident;
- Names of witnesses; and
- Events leading up to the incident and how the incident ended.

### FORM 13 - EVALUATION OF THE PHYSICAL ENVIRONMENT

Location:
Person(s) conducting the evaluation:
Date of Assessment:

This section requires the participation of the authorized employee representative(s).

Instructions: All sections below refer to present conditions. Check "NA" for any items you do not consider applicable to the worksite/facility being evaluated. Using the information from Sections 1-3 and your working knowledge of the building describe in Section 4 the building i.e. number of stories, number of entrances and exits, number of employees, access to the building, security features, areas of concern related to security. Using the information from Sections 1-4 list the specific hazards related to this evaluation in Section 5.

Items	YES	NO	NA	Notes/Comments
1 Cocumity Footunes				
1. Security Features Reception Area Available				
Barriers to Separate Clients from Work Area				
-				
Separate Interview Area(s)				
Emergency Numbers Posted by Phones				
Multiple Exits				
Unobstructed Office Exits				
Door Control(s) i.e. locks, remote buzzer, panic bars				
Door Detectors/door alarm				
Adequate lighting and around the workplace				
Parking lot well light				
Panic Buttons				
Video Monitor(s)				
Landscaping to provide unobstructed view of the workplace				
Limiting the posting of signs on windows				
Other:				
2. Factors That Might Place Employees at Risk				
Work in public settings-e.g. Health Care, Police Officers, Firefighters, Social Workers				
Work late night or early morning hours				
Exchange money with the Public				
Work alone or in small numbers				
Work in a location with uncontrolled public access				
Areas of previous security concerns				
Any other factors that might place employees at risk				

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Items	YES	NO	NA	Notes/Comments	
3. Security Guards					
Are security guards present at the location					
Are guards posted at entrance(s)					
Do they patrol the building					
Are they provided with communication? If yes, indicate what type in notes.					
Any other relevant information?					
<b>4. Description of the Building</b> : Using the information from Sections 1-3 and your working knowledge of the building describe in Section 4 the building (number of entrances and exits, number of employees, access to the building, security features, areas of concern related to security).					
5. Specific Hazards: Using the information from Sections 1-4 list the specific hazards related to this					
<b>5. Specific Hazards:</b> Using the information evaluation in Section 5.	on fror	n Sect	tions 1	1-4 list the specific hazards related to this	

### FORM 14 - JOB SPECIFIC HEAT-ILLNESS PREVENTION PLAN

This plan is specific to the following project and location, in accordance with the Authority's policies and procedures as outlined in the Heat-Illness Prevention Plan (Section 3.5 of the Health & Safety Manual).

Descr	ription	Details		
1.	Site Location			
2.	Date			
3.	' '			
4.	Plan Approved By			
5.	• •			
6.	First Aid and Emergency Medical Service Contacts	First Aid Name(s):		
		Phone:		
		Emergency Medical Service Name:		
		Phone:		
		Local Hospital:		
		Phone:		
1.	Outside work with sun expos	sure and temperatures above 70 °F? □ YES □ No		
2.	Work around hot processes	and/or radiant heat sources? ☐ YES ☐ No		
3.	Workers will wear vapor barrier chemical protective suits? ☐ YES ☐ No			
4.	Work under high relative humidity conditions (e.g., greater than 50%)? $\ \square$ YES $\ \square$ No			
5.	Low wind speeds or lack of	air movement? ☐ YES ☐ No		
6.	Manual labor and tasks requiring physical exertion? $\Box$ YES $\Box$ No			
7.	Worker(s) have not worked in hot environments in the last week? $\qed$ YES $\qed$ No			
8.	Workers wearing multiple la	yers of clothing and/or PPE? ☐ YES ☐ No		
9.	Other:			

# CONDUCT A HEAT HAZARD EVALUATION IF THE ANSWER IS YES TO ANY OF THE FOLLOWING:

- Items 1, 2, or 3 checked above
- More than 2 of the above items checked
- There is another concern regarding heat stress that warrants an evaluation

### **FORM 15 - HEAT HAZARD ASSESSMENT**

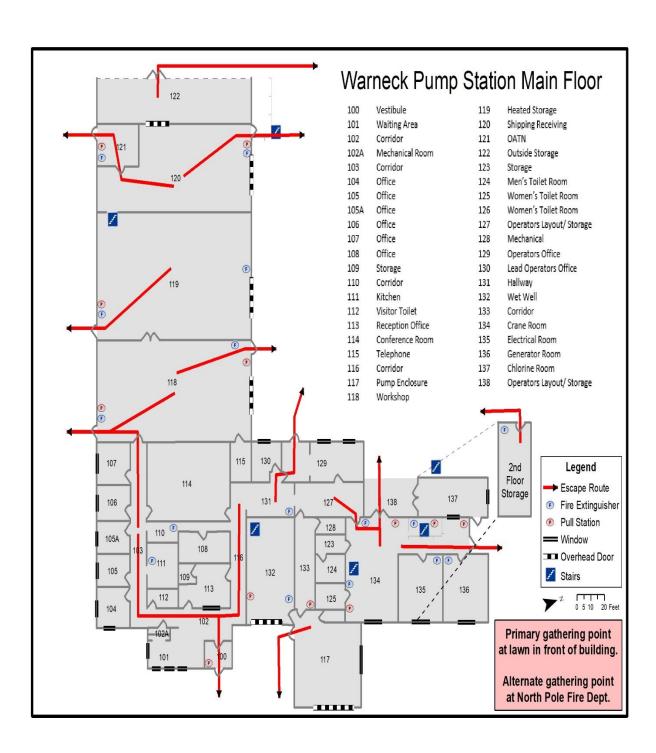
Use the <u>OSHA-NIOSH Heat Safety Tool Mobile App</u> and the <u>Authority's Heat Exposure Calculator</u> to determine the projected outdoor environmental conditions and Hazard Quotient at each work site for the hottest part of the work shift.

LO	cation:
Da	te:
	Hottest Time of the Day from the Heat App (Hour, AM/PM)
	Predicted Maximum WBGT (°F)
	Hazard Quotient (HQ) for Acclimated Workers:
	Risk Level:
	Hazard Quotient (HQ) for Unacclimated Workers:
	Risk Level:
	rrective Actions that will be taken to Prevent Heat Stress  Step 1: Implement Controls to Reduce HQ and Risk Level  a. Action:  b. Action:  c. Action:
2.	Step 2: Implement Physiological Monitoring for High Risk Levels  a. Oral body Temperature:  b. Heart rate recovery:  c. Body Weight or Urine Color Monitoring
3.	Step 3: Implement Engineering Controls  a. Action: b. Action: c. Action:
4.	Step 4: Implement Administrative Controls  a. Action: b. Action: c. Action:
5.	Step 5: Implement Protective Clothing or Equipment Controls  a. Action:  b. Action:  c. Action:

# **SECTION 15.0 - FIGURES**

Figure 1 – Warneck Pump Station Sample Evacuation Map

This is a **sample** Evacuation Map that shows the emergency exit from Corridor 117. Posted within each room is the quickest egress route to the primary gathering point.



# Figure 2 – MMF Maintenance and Operations Building Sample Evacuation Map

Posted within each room is the quickest egress route to the primary gathering point.

### **Administration Office Evacuation Plan**

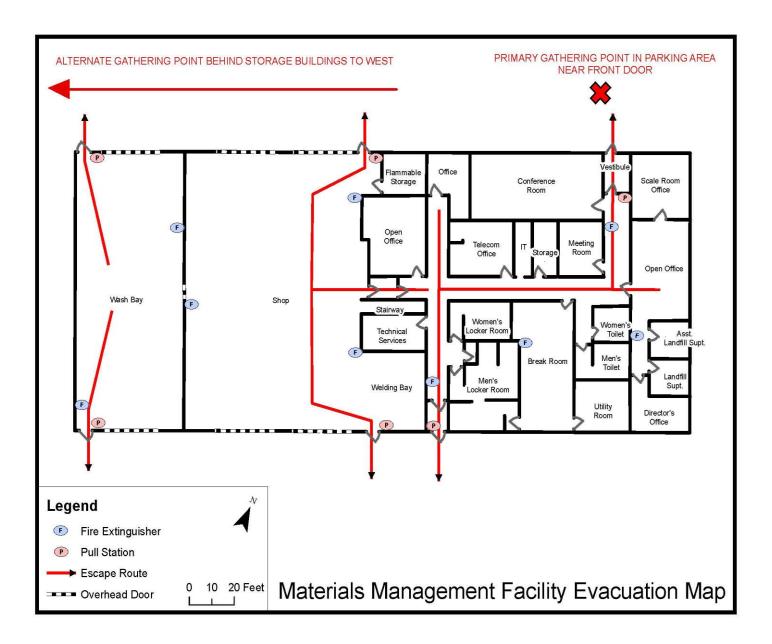
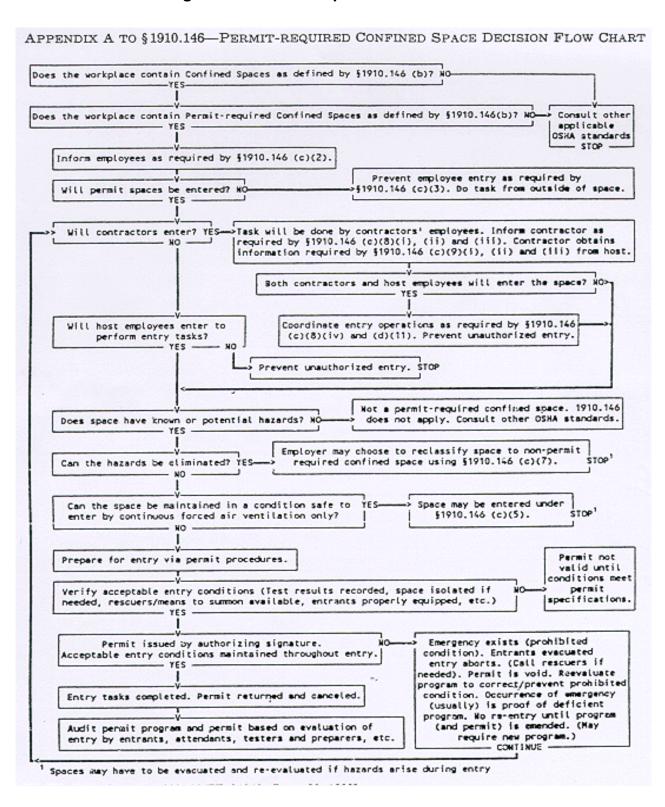


Figure 3 - Confined Space Decision Flow Chart



# **SECTION 16.0 PLAN UPDATES**

The Health & Safety Manual is updated as changes occur such as dictated by personnel, phone numbers, technology, system additions or modifications. A record of updates follows:

Revision	Subject	Date	Entered By
1	Modification on Page 3-3	8/25/03	S. Fitzpatrick
2	Modification on Page 1-1	9/9/03	S. Fitzpatrick
3	Added Safety Glasses Policy to Section 5.1.5	11/3/03	C. Tuttle
4	Major Rewrite: Added State Office Building employees Updated Hot Work Program Added new sections of Firearms, Pyrotechnics, and High Visibility Editorial changes throughout	2/26/04	C. Tuttle S. Fitzpatrick
5	Added Inspection Form; Added New Employee Orientation Checklist; Added list of employees authorized for Confined Space Entry	6/14/04	C. Tuttle
6	Updated confined space permit based on annual review	6/17/04	C. Tuttle
7	Added Steve Marshall to list of authorized employees to act as confined space supervisor	6/21/04	C. Tuttle
8	Added Landfill Gas Well Safety and updated MMF evacuation procedure	3/8/05	J. Mothersell
9	Added language to Section 2.1 B.	8/29/05	C. Tuttle
10	Updated Shoe and Winter Wear policy for reimbursement; replaced D. Evans with Steve McElwain; updated section 7.2 part A	1/23/06	C. Tuttle
11	Deleted hepatitis and tetanus declination forms; rewrote section on requirements for vaccinations	3/27/06	C. Tuttle
12	Added Steve McElwain as Confined Space Supervisor	5/17/06	C. Tuttle
13	Clarified Class II for High Visibility ANSI 107 Standards	7/14/06	C. Tuttle
14	Removed J. Condino; added Bryon Perry; updated Form 6; added new Form 7; added Section 6.4	8/31/06	C. Tuttle
15	Added new sections for off road vehicles and aerial lifts	12/14/06	C. Tuttle
16	Updated Pages 9 and Form 6	3/19/07	C. Tuttle
17	Miscellaneous editorial annual updates	4/18/07	C. Tuttle
18	Removed Debbie Henry from doc.	5/04/07	C. Tuttle
19	Changed Water/Sewer division references to WQ;     Modified Form 1 to include acknowledgements of updates;     Added reference to Landfill Safety Procedure is section 3.1 and added to Form 6 (New Employee Orientation);     Updated section 2.4 to clarify Safety Committee process for reviewing accidents and recommending discipline	9/14/07	C. Tuttle
20	Added MH9 to MMF confined spaces in section 3.2; fixed page numbering	10/12/07	C. Tuttle
21	Added Text to Section 2.4.B.2 Added Form 8, Section 12	12/11/07	C. Tuttle
22	1) Added text to section 2.4.C.1 2) Added text to section10.5.15 3) Added text to form 6	1/07/08	J. Mothersell
23	Added text to Section 2.4.C.1 and Section 10.6 to clarify 24 hour accident reporting requirement, fleet manager notification and responsibilities; clarified confined space descriptions for MMF	6/10/08	C. Tuttle

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24	Modified Assident Form to remove confidential	11/7/00	C Tuttle
24	Modified Accident Form to remove confidential information; added MMF new confined spaces	11/7/08	C. Tuttle
25	Changed Carhartt Clothing Allowance from \$150 to \$200 every 3 years (Section 5.1)	12/15/08	S. Fitzpatrick
26	Entire Plan update; includes incorporation of Motor Vehicle Safety Policy	8/14/09	C. Tuttle
27	Added additional hearing protection required areas to Section 3.4, added language on confined space rescue protocol	6/10/10	C. Tuttle
28	Added the Generator Rooms in BPS1 and BPS2 as hearing protection required areas (Section 3.5); added Vactor Debris Body to the list of Confined Space Entry Permit required areas at the MMF (3.3); added contractor use of Authority-owned equipment (3.2); clarified difference between fall protection General Industry and Construction standard (3.7); updated list of confined space supervisors (3.3); updated workers compensation requirements (2.4); updated emergency response procedures for WPS (2.8); updated Confined Space Permit (Form 3) with current trained supervisors; updated New Employee Training Checklist reference to Chlorine System SOP (Form 6); fixed references to incorrect sections	11/9/2010	C. Tuttle
29	Added alternate confined space entry procedure Updated Water/Wastewater to WQ Updated smoking policy	4/27/2011	J. Mothersell
30	Added additional Sections to 3.0 Operational Safety Procedures to include: (3.2) Landfill Specific Safety Procedures; (3.4) Confined Space; to include Confined Space Procedure For Leachate Manhole Entry (3.9) Respiratory Protection Program; Authority DANC Respirator Use Table; DANC Hazard Assessment Table; Updated Section 14.0 Figures 1 & 2 Evacuation Maps for Warneck Pump Station, MMF and Figure 3 Confined Space Decision Flow Chart.	01/30/12	J. Mothersell
31	Section 3.4, added additional facilities to Water Quality Permit Required Confined Spaces & Created Confined Space Tables 1 & 2; Section 3.6, added additional sites to the Hearing Protection Required Areas Chart; Section 3.9 Respiratory Protection Program) added reference to voluntary use for muriatic acid; Section 14, updated gas meters Test Name & Serial #'s to Form 3, removed inactive WPS employees from list of confined space supervisors, updated Section 9.2 added additional hoist/cranes for WQ and reference to Carthage and Clayton H&S manuals, updated section 3.2 H Solid Waste disposal permit requirements	07/31/2012	J. Mothersell
32	Annual Plan Update; Minor editorial and staff updates to include Section 3.2G, added puncture resistance safety boots to first bullet, increased truck spacing to 15 feet in 8 <sup>th</sup> bullet, Added MMF MPS secondary containment to Confined Space Table 2	3/13/2013	C. Tuttle
33	Revised title of document to include subtitle "Standards and Procedures; Updated Sections 3.2 G (ANSI Z41-1991 with "PR" designations), 3.4-CPR & First Aid every two years, 5.1 G Safety Shoe revised allowable cost from \$150 to \$200 for PR shoes; Accident Report Form updated to include question #20; Updated Form 5 – SAFETY & HOUSEKEEPING INSPECTION FORM,	08/26/2013	C. Tuttle

Health and Safety Manual Development Authority of the North Country

	Confined Space Entry Permit Form; Updated HazCom SME and Confined Space Supervisor list based on personnel changes		
34	Section 3.4 Confined Space, Revised Confined Space Tables 1, 2 & added table 3; Added to Section 10.5 Motor Vehicle General Rules – language regarding minimizing backing; Added language to section 10.6 regarding authorized personnel operating off road ATV's; Added Section 10.7 Power Industrial Trucks; Modified accident form #2 to include additional spaces for reporting information; Updated confined space permit form #3 to include new gas monitor.	05/15/2014	C. Tuttle
35	Section 3.4 Confined Space, Revised List of Confined Space Supervisors, updated Confined Space Meters model & serial number	06/4/2014	J.Mothersell
36	Section 3.4 Confined Space, Revised WQ Confined Space Supervisors List; Section 3.7 Personal Hygiene renamed Bloodborne Pathogens; Section 3.7.1 added Ticks & Lyme Disease; Section 4. Hazard Communication, updated WQ SME; Section 5 added safety puncture resistant shoe inserts language; Confined Space Entry Permit Form 3, Revised List of WQ Confined Space Supervisors	9/3/2014	J.Mothersell
37	Updated Section 2.2, 2.4, 2.6, 2.11 to include Human Resources Department reference; Updated list of confined spaces to remove Chaumont spaces and add Clifton spaces and confined space team members; Updated Section 3.6 to include additional MMF sound pressure readings for shop tools; Updated Section 3.9 Respiratory Protection Program to include description of the Scott Full Facepiece respirator; Updated Confined Space Entry Permit to include current model & serial numbers for gas meters; Form 6 New Employee Safety Training & Orientation Checklist, added Powered Industrial Truck & Off Road Vehicles training	3/27/2015	C.Tuttle
38	Updated to reflect personnel changes and replacement of ANSI standard Z41 with F2412 and F2413	11/20/2015	C.Tuttle
39	Updated Section 2.3 A to include Personnel Safety Training Matrix; updated Section 2.8 to add detail to evacuation procedures; updated Section 3.4 confined space supervisors list to include B. Crary and J. Overstrom; updated Section 3.9 F to clarify requirements for voluntary respirator usage; updated Section 3.9 to switch personnel responsible for providing health care professional with copy of H&S Manual from Program Administrator (i.e., Project Engineer) to HR Manager; updated Section 5.1 to reference new ANSI Standard Z87.1-2010 for Eye and Face Protection Devices; updated Section 6.1 B to include statement that Fire Extinguisher training is required annually; updated Section 10.6 to include requirement for training on off-road vehicles prior to use; updated Form 3 Confined Space Permit to remove K. Wallace; updated Form 6 New Employee Orientation Checklist to include Aerial Lift, and Off Road Vehicle Safety Training.	3/22/2016	C. Tuttle

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40	Replaced all references to Solid Waste Management Facility and SWMF to Material Management Facility and	12/5/16	T. McDonald
	MMF. Removed Valve Pit No.4 from MMF confined space		
	listing.		
	Added Containment Manhole, Containment Catchbasin,		
	Recirculation Tank Manhole, Leachate Tank No. 1, Leachate Tank No. 2, Overflow Tank, Electrical		
	Manhole, Transfer Manhole, Scale 1 and Scale 2 to		
	MMF confined space listing.		
	Added Jill Cuppernell, Robert Henninger and Tyler McDonald to Confined Space Supervisor listing.		
	Removed Robert Stevenson from WQ confined space		
	rescue team		
	Added Andrew Bishop to WQ confined space rescue		
	team. Updated WPS generator dBA reading to reflect new NG generator.		
	Updated the confined space entry permit to reflect new tester at MMF.		
	Added Jason Akins, Brian LaRock and Ben Millard to		
	confined space entry permit as confined space		
	supervisors. Removed Rob Stevenson from confined space entry		
	permit as confined space supervisors		
	Revised the MMF Evacuation Map for new office layout.		
	Added dBA readings for MMF leachate loadout building		
	Blower Room Addition of Typical Lockout/Tagout Procedures		
	Updated Business Portal references to state OnBase™	<u> </u>	
41	2.8 Emergency Evacuation Plan – Updated job titles	12/1/18	C. Tuttle
	2.9 Medical Surveillance – Updated examination results procedure.		
	3.4 Confined Space Procedures – Updated to reflect		
	current staffing.		
	3.5 Lockout Tagout – added paragraph regarding		
	equipment specific procedures. Added 3.7.2 on Poisonous Plants.		
	3.9 Respiratory Protection Program – Updated to reflect		
	current staffing. Added MMF Leachate Tank Cleaning to		
	Hazard Assessment Table.		
	3.10 Hot Work - Updated to reflect that combustibles must be relocated 35' away from hot work vs. 25'.		
	6.1 Fire Protection – Revised language to exclude SOB		
	staff from annual fire extinguisher training.		
	10.6 Operating Off Road Vehicles – Added helmet		
	requirements for UTVs.		
	Updated New Employee Orientation Checklist.  Deleted Telecom from Form 5		
42	Added declination Form 9 for Hep B, C, and Tetanus.	2/3/2020	C. Tuttle
	Removed references to Chlorine Gas at WPS		
	throughout document since this system was decommissioned.		
	Added references to Canton, NY Satellite office and		
	Recycling Transfer Station in Harrisville, NY.		
	Updated list of Confined Spaces: removed spaces for		
	V/Alex Bay facilities since the Authority no longer has a contract with the Village, added RTS confined spaces.		
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	Updated qualified Confined Space personnel in Section 3.4 and on Form 3 with current personnel.  Updated Section 3.8 to prohibit employees from going within 15' of a roof edge without using an approved fall protection system.		
43	Section 2.8 Updated Emergency Reponses Procedures for Dulles State Office Building, Telecommunications new leased space, and Warneck Pump Station. Updated qualified Confined Space personnel in Section 3.4 and on Form 3 with current personnel. Updated list of Confined Spaces: removed spaces to add Town of Lisbon, Morristown, and Thousand Island Boldt Castle due to new contracts.	8/27/2020	C. Tuttle
44	1) Updated Confined Spaces in Table 3 - Permit Required; 2) Incorporated the Authority's Construction Project Management Environmental Health & Safety Requirements in procedure into Section 12; 3) Incorporated Workplace Violence Prevention Policy; 4) Changed process for accident/near miss reporting to OnBase; 5) Changed process for requesting reimbursement for safety gear to OnBase; 6) Updated references to ANSI standards; 7) Change MMF firearm policy; 8) added additional hearing protection required spaces; 9) added respiratory protection requirement for handling D.E. in Water Quality; 10) Removed drug/smoking policy, reference to sexual harassment policy and fire arm policy as these will be covered in Personnel Policy; Miscellaneous edits such as title changes, etc.	12/7/2021	P. Chereshnoski
45	1) Incorporated Access Control Plan into Section 2.8 and 3.12; 2) Removed reference to leased office space for Telecom in Watertown; 3) incorporated Heat-Illness Prevention Plan in Section 3.6. and added new Forms; 4) Updated Section 5 on PPE to incorporate Telecom references and revised jewelry policy; 5) removed references to Recycling Transfer Station; 6) updated job titles/responsibilities; 7) revised WPS and MMF emergency evacuation maps to reflect building modifications.	11/01/2022	C. Tuttle
46	Updated Heat Illness, Return to Work, and PPE Sections. 2) Increased reimbursements for PPE, and added a cold-weather reimbursement.	4/13/2023	A. Barham
47	1) Updated job titles and responsibilities; 2) Added time limit to light duty of 12 weeks; 3) Updated PPE reimbursement section to reference Uniform Allowance Procedure; 4) Updated Confined Space list; 5) Updated list of cranes/hoists; 6) Incorporated elements of Carthage/West Carthage WPCF; and 7) Removed ESAF form. 8) Updated MMF Evacuation Map – Section 15.0 - Figure 2	5/20/2024	C. Tuttle
48	1) Severe weather guidance added for SOB; 2) Replaced landfill specific safety procedures with reference to Solid Waste Operating Permit Rules & Requirements Policy; 3) Updated job titles designated as confined space supervisors and the confined space rescue team; 4) Confined space tables 1, 2, & 3 updated with assessments from 2024; 5) Confined space permit	10/23/2024	C. Gianfagna

	updated to reflect current meters; 6) Added Blower Room at Malone WWTP to list of areas requiring hearing protection; 7) Updated safety shoe policy to include visitors/contractors and updated approval process; 8) Added Scott AV-3000 respirator; 9) Added respirator inspection to employee duties; 10) Workplace Violence Prevention section updated to align with state law; 11) Env. Technician 1 added to list of employees allowed to handle pyrotechnics for vector control; 12) Winter Gear section updated to reference Unform Allowance SOP; 13) Landfill Fire Prevention & Control updated to follow best practices from SWANA training; 14) Form 8: Authority Contractor Rules & Responsibilities updated to include erosion and sediment control certification 15) Minor editorial changes throughout		
49	1) Injured Employee Procedure was updated to require notification of the EHSE for injured employees. 2) Accident Investigation Policy was updated to remove the appointed member of the Safety Committee from the Accident Investigation Committee. 3) Reference to Authority designated first aid and emergency medical providers removed as that list is no longer maintained. 4) Access Controls for MMF was revised to update and add specificity regarding the security system. 5) Audits was revised to remove the requirement that Division Directors notify the COO of inspection deficiencies. 6) Alt Entry confined space table updated to remove the water meter pits in LeRay and Pamelia and to add the spaces for Malone. 7) Permit required confined space table updated to add spaces from Champion, Louisville, Malone, and Sackets. Space locations were updated for GB04 meter pit and wetwell in Champion, the BR01 meter pit and wetwell in LeRay, and the Burnup Rd wetwell in Rutland. 8) Assistant Director of Engineering added to the list of Confined Space Supervisors. 9) Lock and tag locations were added for Carthage and Malone 10) Spaces requiring hearing protection at Malone WPCF added. 11) Recommendation for daily tick checks when working in tick habitat added. 12) Director of HR identified as responsible for respiratory protection medical surveillance program rather than the EHSE. 13) 3M 60926 Multiple Gases/Vapor Cartridge/Filter Combo P100 air-purifying cartridges added to voluntary use program under Respiratory Protection section. 14) Safety Glasses requests updated to be directly to supervisor rather than through OnBase. 15) Fire Alarms section was revised to include a reference to the National Fire Protection Association codes and applicable state and local requirements. 16) Flammable Safety Cans section was revised to remove the requirement that safety cans be metal. 17) Reference to back belts in Material Handling removed. 18) Overhead Crane Locations updated to include the overhead cranes and hoists at the Malone WPCF. 19)	4/8/2025	C. Gianfagna

Assistant Landfill Superintendent, and Director of	
Engineering designated as competent persons. 21)	
Form 2 – Confined Space Entry Permit was revised to	
include updated gas meter information.	