

City of New York
Department of Sanitation



APPENDIX B - DSNY CONTINGENCY PLAN
SOUTHWEST BROOKLYN MARINE
TRANSFER STATION

June 2018

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1.0 PURPOSE AND SCOPE

1.1 General

The purpose of this Contingency Plan is to prepare the Marine Transfer Station (MTS) and its New York City Department of Sanitation (DSNY) personnel for possible emergency situations. Contingency Plans for transport and disposal contractor personnel can be found in Volume 2, Appendix D – Transfer, Transport and Disposal Plan. This Contingency Plan also addresses alternatives for periods during which the MTS June be unavailable due to undesirable conditions, such as the delivery of unauthorized waste or the occurrence of fire, dust, odor, vectors, unusual traffic conditions, equipment breakdown, or other emergencies.

1.2 Authority

The Contingency Plan has been prepared in accordance with 6 NYCRR Part 360.1 and Part 360-16 (c)(4)(ii). The Contingency Plan will serve as the authority for the preparation of supporting operational and emergency implementation procedures.

This Contingency Plan outlines the procedures to be followed by DSNY and, specifically, MTS personnel, in the event of an unanticipated emergency situation. This Contingency Plan considers four such possible events and outlines specific detailed actions to be taken by personnel should any of the unanticipated events occur. The four types of emergency situations considered credible events for implementation of the Contingency Plan are:

- Fire;
- Explosion;
- Liquid and/or gaseous releases (hazardous materials); and
- Facility shutdown for more than 24 hours.

1.3 Plan Distribution

With New York State Department of Environmental Conservation (NYSDEC) acceptance of the Contingency Plan, the on- and off-site personnel listed in Sections 1.3.1 and 1.3.2 will maintain controlled copies of this Contingency Plan. The MTS Location Supervisor will be responsible for

maintaining a copy of the plan in his or her office. It is the responsibility of such personnel to update the document every time an amendment is issued.

1.3.1 On-Site Distribution

MTS Location Supervisor

1.3.2 Off-Site Distribution

First Deputy Commissioner Department of Sanitation 125 Worth Street
New York, NY 10013
(646) 885-4727

Deputy Commissioner of Solid Waste Management
125 Worth Street, 7th Floor New York, NY 10013
(646) 885-4690

Operations Control Office (OCO) Department of Sanitation
125 Worth Street
New York, NY 10013
(646) 885-4700

Director of Export Contract Management Unit Department of Sanitation
125 Worth Street, Room 727
New York, NY 10013
(646) 885-4708

Southwest Brooklyn MTS
New York City Police Department
Captain
60nd Precinct
2951 West 8th Street
Brooklyn, NY 11224
(718) 946-3311

New York City Fire Department
Chief/Fire Marshall
Engine Company 253
2429 86th Street and 24th Avenue
Brooklyn, NY 11204
(718) 999-4444 (FDNY Brooklyn Dispatcher)

Victory Memorial Hospital
699 92nd Street
Brooklyn, NY 11228
(718) 368-1170

East 91st Street MTS
New York City Police Department
Captain
19th Precinct
153 East 67th Street
New York, NY 10021
(212) 452-0600

New York City Fire Department
Chief/Fire Marshall
Engine Company 53
1836 3rd Avenue
New York, NY 10029
(212) 570-4253
Direct Line to FDNY Manhattan dispatcher: (718) 999-2222

Beth Israel Medical Center – Singer Division
170 East End Avenue
New York, NY 10128
(212) 870-9000

Hamilton Avenue MTS
New York City Police Department
Captain
72nd Precinct
830 4th Avenue
Brooklyn, NY 11232
(718) 965-6311

New York City Fire Department
Chief/Fire Marshall
Engine Company 279
Ladder Company 131
252 Lorraine Street
Brooklyn, NY 11231
(718) 965-8279
Direct line to FDNY Brooklyn dispatcher: (718) 999-4444

New York Methodist Hospital
506 6th Street
Brooklyn, NY 11215
(718) 780-3000

North Shore MTS
New York City Police Department
Captain
109th Precinct
37-05 Union Street
Flushing, NY 11354
(718) 319-5100

New York City Fire Department
Chief/Fire Marshall
Engine Company 297
119-11 14th Road
College Point, NY 11356
(718) 476-6297

Flushing Hospital Medical Center
4500 Parsons Boulevard
Flushing, NY 11355
(718) 670-5000

1.4 Plan Maintenance

The Contingency Plan will be reviewed on an annual basis and updated when:

- There is a change to the design or operation of any applicable system;
- There is a change in the listing of emergency equipment and/or materials provided to prevent and/or contain a release or fire; and/or
- There is a change in the name and/or telephone number of the Emergency Coordinator.

The Contingency Plan will be reviewed and amended appropriately when any of the above actions occur. All amendments to the Contingency Plan will be reviewed by the appropriate personnel at the Solid Waste Management Bureau (SWM) and will be amended by internal general orders. NYSDEC will be notified of any proposed changes to or enactment of the Contingency Plan.

In addition, any Contingency Plan revisions will be submitted to NYSDEC for review and approval.

2.0 ORGANIZATION

2.1 Normal Organization

Organization of personnel will be such that the MTS will have sufficient qualified personnel present at all times, during all phases of operation. Attachment 1 identifies the chain of command at the MTS. Attachment 2 represents an agency organization chart for the operation of the MTS.

2.2 Emergency Response Organization

Attachment 3 identifies the Emergency Response Organization at the MTS. In the event of an emergency situation, the MTS Location Supervisors will be designated as the Emergency Coordinator. The organization chart will be applicable for all MTS working shifts. The specific responsibilities of the Emergency Coordinator during an emergency are described in Section 3.0.

In the event that the MTS Location Supervisors are unable to fulfill his or her duties as Emergency Coordinator, the next senior MTS worker will be the first alternate replacement; he or she will then assume the responsibilities of the Emergency Coordinator. In addition, OCO, manned 24 hours per day, 7 days per week, shall serve as the off-site Emergency Coordinator if the need arises.

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3.0 RESPONSIBILITIES

3.1 MTS Location Supervisor

The MTS Location Supervisors will be responsible for emergency coordination and establishing and maintaining the role as liaison between local Emergency Response Teams. The MTS Location Supervisors will provide specific emergency implementation procedures that June override the delineated step-by-step procedures if he or she finds such a change necessary in order to ensure the safety of personnel, the environment, or the operation of the MTS. However, before overriding steps, the Supervisor will be responsible for ascertaining whether or not all operational precautions and safety measures have been taken. The authority and the responsibility for the overall executive direction of the Contingency Plan will rest with the Location Supervisors, designated as the Emergency Coordinator. The Emergency Coordinator will have the authority to commit the personnel, equipment, and financial resources, as required, to implement this Contingency Plan. The Emergency Coordinator's responsibilities will include, but June not be limited to, the following:

- Ensuring that internal alarms and/or communication systems are activated to notify all MTS personnel and, if their help is needed, notifying all appropriate state and local agencies with designated response roles, as described in Section 7.0 of this Contingency Plan.
- Determining if the MTS has had or could have a fire or explosion condition that could threaten human health or the environment beyond the MTS's property boundary. If so, the Emergency Coordinator must report the incident or potential incident to the appropriate officials outlined in Attachment 4 of this Contingency Plan. Attachment 5 includes a list of important DSNY contacts.
- Taking all reasonable measures necessary to ensure that fires and/or explosions do not occur, recur, or spread into other areas of the MTS.
- Providing or arranging for disposal of solid waste at the MTS and/or any other material immediately after an emergency situation occurs.
- Ensuring that cleanup procedures are completed and that emergency equipment, as listed in Attachment 6, is cleaned and readied for its intended use.
- Securing conditions at the MTS in the event of an emergency.
- Preparing incident reports and maintaining incident logs.

DSNY will notify the NYSDEC if any enactment of the Contingency Plan occurs or if any changes are proposed to the Contingency Plan. Contingency Plan revision procedures are included in Section 1.4, Plan Maintenance, and NYSDEC notification procedures related to illegal unauthorized waste are provided in Section 6.2.1.

3.2 Sanitation Workers

MTS workers will be responsible for implementing the necessary emergency response actions as directed by the Emergency Coordinator. Responsibilities will include:

- Ensuring that proper personal protective equipment (PPE) is donned;
- Being familiar with emergency procedures; and
- Being knowledgeable in the location and proper use of emergency equipment.

4.0 COORDINATED EMERGENCY SERVICES

Attachment 4 lists all local, state, and federal agencies that June be called upon to provide assistance in the event of an emergency situation at the MTS.

Since the MTS is located in the City of New York, all local Emergency Response Teams (ERTs), Emergency Medical Services (EMSs), and police and fire departments will be notified and requested to provide assistance through either emergency “911” or direct dial telephone numbers. As a result, no written notification outlining the notification system and the need for cooperation is required as part of this Plan. However, a controlled copy of this Contingency Plan will be provided to all potential responding local agencies listed in Section 1.3. In addition, all potential emergency responders will be afforded the opportunity to become familiar with the MTS. All communications with the media will be handled by DSNY’s Bureau of Public Affairs.

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5.0 TRAINING

5.1 General

The emergency training requirements addressed herein describe the additional training that will be necessary for personnel involved in implementing the Contingency Plan. This section complies with the requirements pursuant to 6 NYCRR Part 360.1 and Part 360-16 (c)(4)(ii).

The outline provided ensures that each individual with significant responsibilities during emergencies will be able to handle emergency situations at the MTS in an efficient and effective manner.

5.2 Functions

In any emergency situation, OCO will be notified in the absence of a Supervisor and will coordinate all emergency situations with outside agencies.

All MTS workers will receive the same emergency and operational training as Supervisors. All MTS workers will receive training that will provide them with the following:

- The ability to address plant personnel and their needs at the time of an emergency

- situation;
- Knowledge of the use of all fire-fighting equipment available at the MTS; and
- Familiarity with procedures for handling possible bomb threats and/or explosion situations as outlined in this plan.

As applicable, MTS personnel will be trained in the proper and safe operation of equipment. They will be familiar with the proper use of hard hats, goggles, face masks, gloves and other appropriate PPE so that work-related injuries can be avoided. They will also be trained in handling project-specific emergencies and will be provided with telephone numbers of emergency services, such as fire, police, and ambulance/hospital.

6.0 DETECTION OF POTENTIAL HAZARDS

6.1 General

During normal daily operations, personnel assigned to the MTS will be aware of the potential hazards associated with MTS operation and will notify the MTS Location Supervisors of any unsafe conditions. The areas that June have potential hazards associated with them as well as the precautions that should be taken to monitor the conditions of these areas are as follows:

- Ramp/Scale/Tipping Floor
 - Inspect all areas for debris and spills;
 - Inspect fire-fighting stations for proper storage and equipment; and
 - Be aware of truck traffic.
- Processing Floor
 - Inspect for debris and spills and unauthorized waste;
 - Inspect fire-fighting stations for proper storage and equipment;
 - Inspect heavy mechanical equipment (e.g., front-end loaders, hydraulic tamper) for proper operation; and
 - Be aware of heavy equipment operation and tipping floor truck traffic.
- Container Loading, Lidding and Staging
 - Inspect for debris and spills and unauthorized waste;
 - Inspect fire-fighting stations for proper storage and equipment;
 - Inspect heavy mechanical equipment (e.g., hydraulic lift spreaders, shuttle cars, gantry cranes) for proper operation; and
 - Be aware of heavy equipment, shuttle car, and crane operations.
- Barge Mooring Areas

An outside transport and disposal contractor will be responsible for the pier level operations and the detection of potential hazards around the barge mooring areas (see Appendix D – Transfer, Transport and Disposal Plan, Barge Operations Plan).

The following list is an example of the responsibilities of the contractor within the barge mooring areas at the MTS:

- Inspect for debris and spills;
- Ensure that mooring lines do not present a tripping hazard;
- Inspect barge security and container stability;
- Inspect fire-fighting stations for proper storage and equipment;
- Ensure that all safety equipment is in its assigned space;
- Inspect heavy mechanical equipment (e.g., gantry cranes) for proper operation; and
- Be aware of heavy equipment operation and barge movements.

Container Storage Areas

- Inspect for debris and spills;
- Inspect fire-fighting stations for proper storage and equipment;
- Inspect heavy mechanical equipment (e.g., front-end loaders) for proper operation; and
- Be aware of heavy equipment operation and truck traffic.

Maintenance Building

- Inspect for debris and spills;
- Inspect fire-fighting stations for proper storage and equipment; and
- Be aware of heavy equipment operation and truck traffic.

6.2 Unauthorized Waste

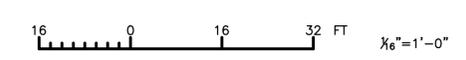
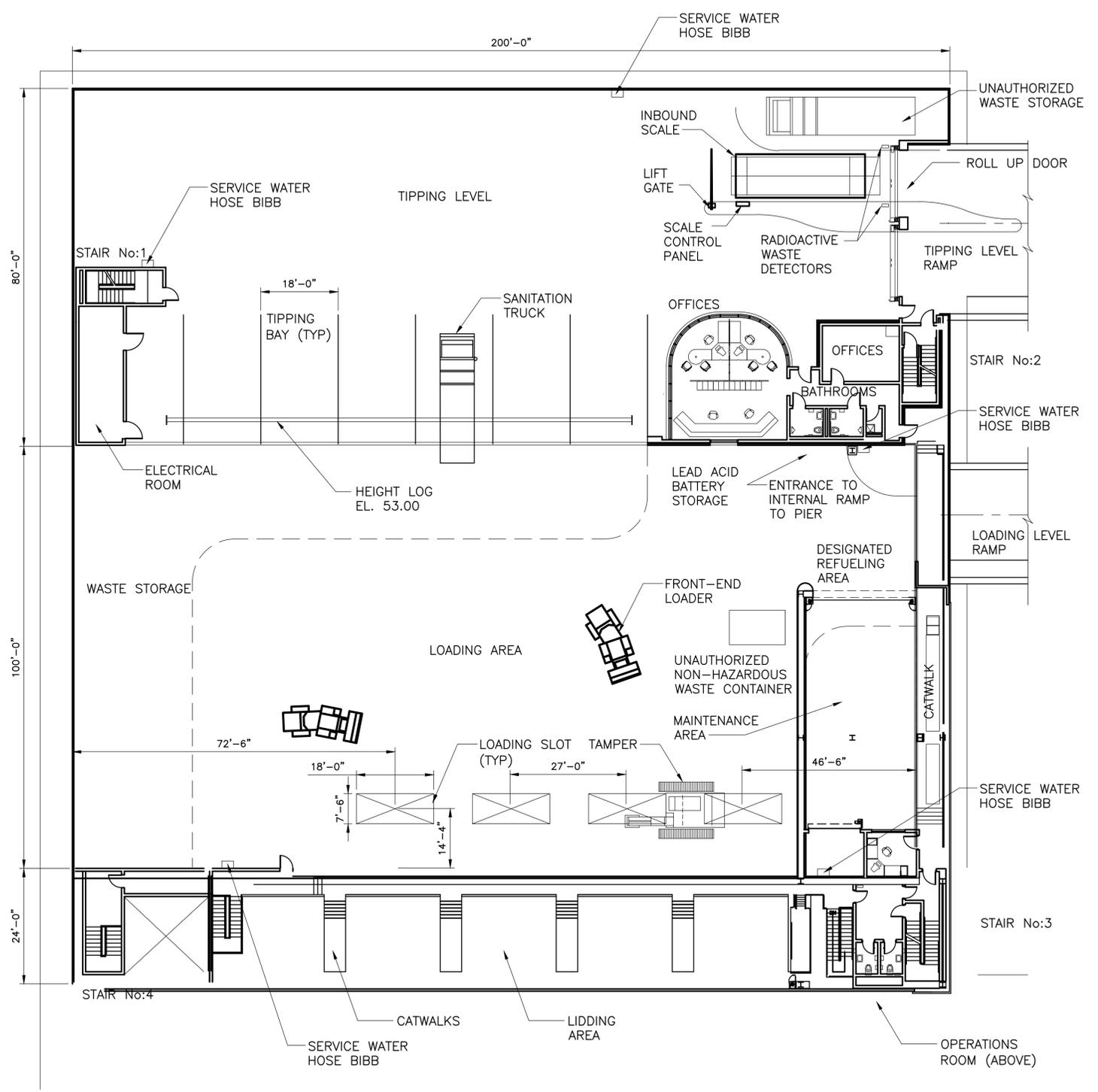
6.2.1 General Procedures for Managing Hazardous, Dangerous, or Illegal Unauthorized Waste

In conformance with 6 NYCRR Part 360-1.9(h), Part 360-1.14(e), and the policies of NYSDEC, the information provided in this section describes responses to be taken in order to ensure the safety of personnel and the environment; investigate suspect materials; notify appropriate DSNY

offices, on-site NYSDEC personnel, and other agencies; and remove and clean up the area in the event that any hazardous, dangerous, or illegal unauthorized waste (e.g., characteristic hazardous waste, regulated medical waste, asbestos) is received at the MTS. These general procedures are based on the following steps:

- Isolation and Security
 - Waste suspected of being hazardous, dangerous or illegal is moved to the unauthorized waste storage area or truck detention area and is isolated by MTS staff;
 - If the suspected unauthorized waste is liquid, hazardous, friable asbestos, or otherwise cannot be safely secured in the unauthorized waste storage areas (see Figure 1 – Southwest Brooklyn MTS Floor Plan), such unauthorized waste shall be isolated and secured where it is discovered; and
 - The truck, area, or container holding the unauthorized material is appropriately marked and supervised to ensure its isolation.
- DSNY Notification
 - The MTS Location Supervisors are notified.
 - OCO notifies Environmental Police Unit (EPU), as necessary and appropriate.
 - EPU is dispatched to the scene, assesses the incident, and notifies OCO and SWM of the appropriate handling and removal methods, if necessary.

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WARNING
 IT IS A VIOLATION OF SECTION 2309.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

GREELEY AND HANSEN
 111 BROADWAY, SUITE 2101
 NEW YORK, NEW YORK 10006

DESIGNED: SLK
 DRAWN: SLK
 CHECKED: JHL

APPROVED:

NO.	DATE	APPD.	REVISION

SCALE



CITY OF NEW YORK
 DEPARTMENT OF SANITATION
 MARINE EXPORT OF SOLID WASTE
 SOUTHWEST BROOKLYN
 PART 360 PERMIT APPLICATION TRANSFER STATION

MECHANICAL
 TIPPING/LOADING LEVELS
 PROCESS FLOOR PLAN

FILE NAME: DSNYPM9020
 DWG: M-902
 SHEET NO.: 21 OF 97
 DATE: SEPTEMBER 2017

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Appropriate Handling

- EPU is dispatched to the scene and directs the appropriate handling and removal of the suspect material;
- EPU will request assistance from other City agencies (e.g., NYCDEP hazardous materials team, Office of Emergency Management [OEM], Fire Department [FDNY], Police Department [NYPD], or private hazardous materials handling contractors, as necessary, depending upon the type of unauthorized waste encountered); and
- Within 72 hours of the discovery of any hazardous, dangerous, or illegal unauthorized waste (e.g., radioactive, bioterrorism, regulated medical, and asbestos wastes) at the MTS, such waste will be removed from the MTS by a licensed hauler, and the hauler will then transport the unauthorized waste to an appropriately permitted handling facility. EPU June also remove the unauthorized waste for subsequent licensed transport to a permitted facility.
- NYSDEC Notification
 - If Hazardous, dangerous, or illegal unauthorized waste is discovered during standard business hours, SWM will notify the NYSDEC Regional Solid Waste Engineer, NYSDEC Division of Law Enforcement by telephone. If such an incident occurs outside of standard business hours (e.g., night shifts or weekends), the SWM will notify the NYSDEC during the standard business day following discovery of hazardous, dangerous, or illegal unauthorized waste. During all hours, including non-business hours, an e-mail must be sent to the Regional Solid Waste Engineer and anyone else NYSDEC requests if such an incident occurs.
 - If the suspected hazardous, dangerous, or illegal waste is unable to be handled appropriately within 72 hours, the NYSDEC Regional Solid Waste Engineer will be notified.

Additional procedures for specific hazardous, dangerous, or illegal unauthorized waste types of particular concern are provided in Sections 6.2.2 through 6.2.6. Training programs conducted for MTS employees to learn their roles in the MTS operations, which include unauthorized waste recognition, reporting and handling responsibilities, are described in Appendix A —Training Plan. Non-hazardous unauthorized waste management procedures are described in Section 6.2.7 to this Appendix.

Record keeping procedures for incidents involving hazardous, dangerous, or illegal unauthorized waste are contained in Section 8.0, Records.

If an unacceptable or suspect waste load is identified during visual observation while still in a vehicle, the vehicle will be detained and the MTS Location Supervisor will be contacted immediately. Additional inspection of the load would be performed to determine the composition of the material, and if approved, it would be accepted. If the material is identified as clearly suspect and it is transported by a private firm or individual, MTS personnel will manage the situation in accordance with the standard general procedures described in Section 6.2.1. EPU will take charge of the site upon arrival, and the Deputy Commissioner for Legal Affairs will also be notified.

If a small quantity of hazardous or dangerous waste is found at the MTS and not contained within a truck, the material will be isolated and secured to prevent any further impact, and the notification and handling procedures previously described would be enacted. An emergency purchase order and specification will be prepared by EPU, and at least five NYCDEP-approved hazardous waste removal contractors will be contacted by phone, allowed to visit the site, and asked to submit a bid within 24 hours for the complete removal and legal disposal of the contaminated material, in accordance with U.S. Environmental Protection Agency (USEPA) and NYSDEC regulations. As stated previously, under certain circumstances, EPU will contact NYCDEP directly to address the disposition of hazardous materials or other unauthorized waste. NYCDEP maintains a list of authorized contractors that June be engaged for the management of these materials. The most recent list of NYCDEP hazardous materials contractors is provided in Attachment 7.

EPU June also remove small amounts of hazardous, dangerous, or illegal waste from the MTS for subsequent licensed transport to a permitted facility. Such waste – excepting radioactive waste as described in Section 6.2.2 – would be transported by the EPU for temporary storage at the DSNY Satellite Enforcement Headquarters at 1824 Shore Parkway, Brooklyn, New York 11214 (USEPA ID# NYD982741308). The storage facilities at this location include chemical storage lockers within a locked trailer surrounded by a locked chain link fence. Access to the trailer is limited to EPU personnel, and the site is supervised by DSNY enforcement officers. EPU would arrange for the stored material to be transported to a permitted facility by a private contractor according to the procedures described in this section (Section 6.2.1), which includes a

list of contractors available for such transport. Additional hazardous materials contractors are listed in Attachment 7.

EPU June also directly engage a private contractor with the expertise to handle the hazardous unauthorized waste. DSNY maintains open purchase orders for the management of unauthorized waste. A list of current vendors that June be hired by DSNY to manage unauthorized waste and the waste that each vendor will be responsible for handling is provided below:

Radiac Environmental Services (Chemical Disposal)
261 Kent Avenue
Brooklyn, NY
11211
(718) 963-2233
(800) 640-7511

Leard Environmental Services, Inc. (Chemical Disposal)
8 Andrew Street
Port Jefferson Station, NY 11776
(631) 476-1592
(888) 955-3273

U.S. Ecology (Broker/Transporter NARM Waste Hauler) (Radioactive)
1777 Terminal
Drive P.O. Box 638
Richland, WA 99352
(509) 377-2411

Health Care Waste Services (Regulated Medical Waste)
1370 Viele Avenue
Bronx, NY 10474
(800) 801-7124
(718) 842-9655

Only NYSDEC-approved licensed contractors will be engaged to manage unauthorized waste.

If the quantities of hazardous, dangerous, or illegal waste and the costs associated with the removal thereof exceed the funding limitations permitted for an emergency purchase order, DSNY Legal Affairs will contact the NYCDEP Division of Emergency Response and Technical Assessment and OEM for assistance. The DSNY Commissioner will then issue a Declaration of Emergency. Contract documents and specifications will be prepared by EPU, and at least five NYCDEP-approved hazardous waste removal contractors will be contacted for a site visit and

subsequent bid submission within 24 hours. Letters signed by the DSNY Commissioner will be sent to the City's Law Department along with the Declaration and the bid abstract. The Notice to Proceed will be furnished to the lowest bidder as soon as the approval is received from the Law Department. The Commissioner and the Juneor's Office will expedite contract procedures and funding approvals for the rapid and safe removal of the contaminated material. Award procedures will also be expedited, followed by the removal, transport, and disposal of the material in accordance with state and federal regulations.

If DSNY is unable to have the hazardous, dangerous, or illegal unauthorized waste removed within 72 hours of discovery, DSNY shall, within such 72-hour deadline, fax the NYSDEC Regional Solid Waste Engineer a notice detailing: (1) the date and time such unauthorized waste was discovered; (2) that such waste was isolated and secured; (3) the quantity of such waste; (4) the identification of such waste (if known); (5) why such waste cannot be removed from the MTS within the 72-hour deadline; and (6) when and how such waste shall be removed from the MTS.

All unauthorized waste removal activities will be performed in a manner consistent with 6 NYCRR Part 360, Part 364, Parts 370 through 374, Part 376, and Part 381, which regulate solid waste, waste transporter permits, and the manifesting, reporting, handling, transport, and disposal of hazardous waste and low-level radioactive waste.

In addition to the procedures described in this section, the following contact information is maintained on-site and with OCO should an incident involving hazardous waste require assistance in addition to that of EPU:

Region 2 General Number	718-482-4900 #4
NYSDEC Emergency Hotline	800-457-7362
NYSDEC Hazardous Waste Hotline	800-342-9296
NYSDEC Region 2 Water Engineer	718-482-4930
NYSDEC Region 2 Spills Engineer	718-482-4933
NYSDEC Region 2 Solid and Hazardous Materials Engineer	718-482-4896

6.2.2 Radioactive Waste

The MTS staff will implement the following procedures and those contained within Sections 6.2.2.3 through 6.2.2.5 in order to screen the incoming trucks for radioactive material and to handle any radioactive material that June be detected in the facility. Radioactive waste will be removed from the facility within 72 hours as mentioned in Section 6.2.1, General Procedures for Managing Hazardous, Dangerous, or Illegal Unauthorized Waste. These procedures are based on testing incoming trucks with stationary, scale-mounted radiation detection equipment, isolating the suspect truck, and notifying EPU if it is determined that a truck contains radioactive material. Upon notification from the MTS Location Supervisor or designated staff, EPU will be dispatched to the MTS to perform additional screening of the suspect truck with handheld radiation detection equipment capable of identifying radioactive isotopes. Based upon the screening results, EPU will be responsible for determining which of the following actions should be used for proper management of the suspect waste load in conformance with the New York City Department of Health and Mental Hygiene (NYCDOH) Radioactive Materials License (Attachment 8):

- If the stationary equipment registered a false positive and the load does not actually emit radiation at the minimum alarm trigger setting of five times background levels, the load June be disposed of as authorized waste.
- If the load contains low-level radioactive material associated with medical waste, the load, or the radioactive portion thereof, June be transported to one of the two DSNY storage areas licensed to store material for radioactive decay for subsequent disposal as authorized waste.
- If the load contains radioactive material that EPU is not authorized to handle under the NYCDOH Radioactive Materials License, EPU will contact the NYCDOH Bureau of Radiological Health for assistance.
- If the load is radioactive and presents an immediate threat to public health or security, EPU will enact the appropriate emergency procedures and notify emergency response organizations (e.g., NYCDOH Bureau of Radiological Health).

Further notification, reporting, testing, and handling procedures will be implemented, as discussed below. If it is determined that the truck load is unacceptable for disposal as an

authorized waste, the protocols discussed in Section 6.2.1 will be enacted in conjunction with the procedures described in this section.

6.2.2.1 Radiation Detection Equipment General Specifications

The MTS utilizes a Thermo Fisher Scientific Model ASM-IV 3K radioactive material detection system mounted on the incoming scale. The stationary detection system is configured to screen all incoming, scaled trucks for radioactive materials, and the equipment has the capability to detect medium- and high-energy gamma emitters from the truckloads traveling over the scale at speeds up to 5 mph. Special speed control sensors utilizing heavy-duty industrial-grade photo beams will be used to monitor vehicle speed. If the vehicle exceeds the 5 mph speed limit while traveling through the radiation detectors, visual and audible alarms will be activated. The detection system will also be capable of detecting and displaying ambient background radiation levels, and the alarm will be set to display/sound at five times background radiation levels. The system alarm will include visual and auditory signals that will alert the MTS staff of radioactive loads entering the facility. In addition, the equipment is installed in a manner to prevent its physical contact with incoming trucks and resulting damage.

The stationary radiation detection equipment will be calibrated annually by a certified contractor according to the original equipment manufacturer's recommendations. Daily system checks will be performed by the Location Supervisors to ensure that the equipment is operating properly and detecting background radiation appropriately.

6.2.2.2 Handheld Radiation Detection Equipment General Specifications

EPU currently uses two types of handheld detection equipment to screen suspect truckloads. A Thermo Electron Corporation Identifinder (Fieldspec Gamma Spectrometer) is used to screen the suspect truckload and identify the radio-isotope producing the radiation. The Identifinder is a digital gamma spectroscopy and dose rate system providing nuclide identification, spectrum analysis, dose rate calculation, total dose display, and source finding. A Thermo Electron Corporation Micro Analyst (Survey Analyst Meter) is used as a scanning meter to aid in the segregation of the radioactive portion of the load, when needed. The Micro Analyst is a portable survey meter that measures gamma and X-ray radiation from background level up to 5000 uR/h.

Equipment equivalent to the Identifinder and the Micro Analyst June be used in the future by DSNY. Handheld radiation detection specifications for equipment currently utilized by EPU are calibrated annually by the original equipment manufacturer and/or a certified contractor. The Identifinder units are currently calibrated by Thermo Electron, Santa Fe, New Mexico; Radiation Safety and Control Services of Stratham, New Hampshire, currently provides calibration for the Micro Analyst units. The units also contain a 137CS check source that is used as a secondary standard for operations checks between the annual calibrations.

6.2.2.3 *Radiation Detection Alarm Response Procedures (Radiation Action Plan)*

The Location Supervisors and/or the Supervisor's designee shall be responsible for implementing the following Radiation Action Plan should the stationary radiation detection alarm sound. At all times, either the Location Supervisors or the Supervisor's designee shall be on-site to ensure prompt reaction to any alarm. A flowchart depicting the following procedures is included in Attachment 9A – MTS Radiological Refuse Management Flowchart.

In the event that the stationary radiation detector alarm is activated, the following shall occur:

- DSNY Personnel shall immediately notify the Location Supervisors. The Location Supervisors shall notify OCO at (646) 885-4702.
- The driver and loader of the vehicle shall be instructed to exit the vehicle and walk through the alarm system to ensure that the vehicle is actually activating the low-level alarm system and that the workers have no effect on the low-level monitoring device.
- The driver will then be instructed to move the vehicle to the designated truck detention area.

If the driver or loader of a vehicle activates a low-level alarm, the following shall occur:

- If the driver or loader who sets off the alarm has a medical condition requiring radiation treatment for the condition, and it is determined that the driver or loader is the sole source of radiation, the driver and loader will be allowed to continue dumping in accordance with the procedures already established by the MTS for non-radioactive waste.

In case a driver or loader activates the alarm but does not have a medical condition requiring treatment, the following shall occur:

- The Location Supervisors shall initiate notification procedures as listed above;
- OCO shall notify EPU;
- An EPU officer shall respond to the MTS;
- EPU, in conjunction with NYCDOH, will investigate; and
- EPU shall provide a report to the DSNY clinic on the results of its investigation. (The DSNY clinic monitors the medical progress of injured DSNY employees to facilitate their proper return to appropriate work activity.)

If it is determined that the truck is the source of radiation, the following shall occur:

- The Location Supervisors shall initiate notification procedures as listed above;
- OCO shall notify EPU;
- An EPU officer shall respond to the MTS;
- The EPU officer will utilize a handheld radiation detection unit to further screen and identify the radioactive material in the suspect load;
- The truckload, or radioactive portion thereof, will be transported to a licensed, off-site DSNY storage area and, if not already done so, placed in a drum for further monitoring and/or decay, as described below. Once the radioactive material leaves the MTS, EPU will be responsible for appropriate transport, storage and monitoring, and the ultimate disposition of the load.

If EPU is not authorized to handle the suspect load, the following shall occur:

- If the suspect load contains an industrial radionuclide or other material that EPU is not authorized to handle, the load will not be transported to a storage site. EPU will request assistance from the NYCDOH Bureau of Radiological Health.

In many cases, low-level radiation from DSNY-managed Waste collection vehicles can be attributed to the disposal of household waste generated by persons receiving radiation treatment for cancer or other medical conditions. In accordance with Article 175 of the

New York City Health Code, loads identified as containing such low-level radioactive waste, or the portion of the load identified as radioactive, will be transported to an off-site DSNY storage

area, isolated, and held for 24 hours or longer. In most cases, the radioactive portion of the load will be segregated at the storage facility and stored for decay. As specified in the Radioactive Materials License issued to DSNY (Attachment 8), the following DSNY facilities are authorized to store radioactive materials for decay:

- 3 Farragut Street, South Bronx Marine Transfer Station, Bronx, NY 10474;
- Southwest Marine Transfer Station, 25th Avenue and Bay 41st Street, Brooklyn, NY 11214; and
- South Avenue off West Shore Expressway (Salt Dome), Staten Island, NY 10314.

After the holding period, the material will be tested again by EPU for low-level radiation. If the radiation has diminished to acceptable levels, the load will be disposed of as authorized waste. However, if the radiation has not diminished to acceptable levels, EPU will notify the NYCDOH Bureau of Radiological Health, and EPU and NYCDOH will coordinate the licensed hauling of the material.

If at any time during the initial response, screening procedures, or storage of radioactive material, EPU determines that the load presents an immediate threat to public health or security, EPU will enact the appropriate emergency procedures and notify emergency response organizations (e.g., NYCDOH Bureau of Radiological Health). Likewise, if EPU encounters radioactive material it is not authorized to handle, such as an industrial radionuclide, EPU will contact the NYCDOH Bureau of Radiological Health for assistance.

The policies and procedures discussed in Section 6.2.2, Radioactive Waste; Attachment 8, City of New York Radioactive Materials License; and Attachment 10, DSNY Environmental Enforcement Unit Radiation Policy and Procedure Manual, direct the EPU to request assistance from the Bureau of Radiological Health (NYCDOH) should the EPU encounter radioactive material, such as radium or other long term isotopes, that the EPU is not authorized to handle. Section 6.2.1, General Procedures for Managing Hazardous, Dangerous, or Illegal Unauthorized Waste, also lists a private contractor that June be engaged by the EPU should such material be encountered. The EPU will rely on the assistance and expertise provided by the NYCDOH and/or the private radioactive waste contractor to isolate, handle, haul, and dispose of the radioactive material in a safe and appropriate manner.

Attachment 10 provides detailed information concerning the handling procedures used by the EPU for the Class A, stable low-level radioactive waste the EPU is authorized to handle.

6.2.2.4 *Radiation Action Plan Implementation*

The MTS Location Supervisors are responsible for ensuring that the procedures of the Radiation Action Plan are enacted during an alarm event. The Location Supervisors are also responsible for ensuring that all MTS employees have been trained to react appropriately should a radioactive load appear on-site.

Appropriate MTS staff (i.e., the Location Supervisor and the Supervisor's designee) will be trained to use the stationary radiation detection equipment. This will occur during the initial training period provided to employees upon assignment to the MTS. Training June also be provided, as appropriate and at the discretion of DSNY or the MTS Supervisor, throughout an employee's employment at the MTS.

EPU officers with radiation detection responsibilities will be trained according to the EPU industrial hygiene program and radiation policies and procedures described in Section 6.2.2.6.

6.2.2.5 *Record Keeping and Reporting*

The MTS Location Supervisors will keep a radiation log describing each alarm event, each daily radiation detection equipment check, and each annual equipment calibration. The log will record the following alarm event information:

- Type of vehicle;
- Vehicle code/license number;
- Carrier name and contact information;
- Stationary detector meter readings;
- Operator/loader, if present;
- Truck load origin (District, Section, Route Number), if known; and
- Actions taken to ensure proper removal of radioactive material from the MTS.

In addition to the radiation detection log, an Unusual Occurrence and Accident Report form (Attachment 11), will be completed and submitted to the SWM Operations office in order to document the event. The scale system will also record the alarm event as part of the system's automatic electronic data collection.

EPU will also keep records of the alarm event and the disposition of any radioactive load, as required by its Radioactive Materials License and in accordance with the EPU Radiation Policy and Procedure Manual, provided in Attachments 8 and 10, respectively.

6.2.2.6 *Environmental Enforcement Unit Radiation Policy and Procedure Manual*

The EPU Radiation Policy and Procedure Manual (Attachment 10) outlines the scope of the DSNY radiation detection program and the responsibilities of EPU personnel, including an industrial hygienist, for implementing the radiation policy.

6.2.3 Bioterrorism Waste

Any material delivered to the MTS that June be considered bioterrorism waste will be handled in the same manner as other hazardous, dangerous, or illegal wastes as described in Section 6.2.1, with notification of OCO and EPU. EPU will dispatch officers to the MTS and call in other City agencies (e.g., NYCDEP, OEM, NYPD, FDNY) or private contractors as necessary. Bioterrorism waste will be removed from the facility within 72 hours as mentioned in Section 6.2.1, General Procedures for Managing Hazardous, Dangerous, or Illegal Unauthorized Waste.

Should any bioterrorism waste present an immediate threat to the health of MTS employees, local emergency services would be immediately contacted through "911" to ensure proper medical care for any affected employees. Additional information regarding a MTS response to terrorist threats is included in Section 7.7.

6.2.4 Lead Acid Batteries (LABs)

Upon delivery to the MTS, LABs will be stored on-site in the designated and secure unauthorized waste storage area on the loading floor. The MTS Location Supervisor will contact OCO; OCO will then make arrangements for the Bureau of Cleaning and Collection (BCC) to

remove the LABs from the MTS to the DSNY Central Repair Shop located at 52-35 58th Street, Woodside, Queens. During the 15:00 to 23:00 and 23:00 to 07:00 shifts, the Location Supervisors will contact OCO directly. The Central Repair Shop receives batteries from all DSNY facilities, including transfer stations (TS) and garages, and engages a private contractor to haul the accumulated batteries as a universal waste to an appropriately licensed facility. All LABs encountered at the MTS will be handled in a manner consistent with 6 NYCRR Part 374.3, Standards for Universal Waste, as well as the additional procedures listed below.

Storage of a Lead Acid Battery

In order to safely house the batteries prior to removal by BCC, the LAB storage area will meet the following requirements:

- Only indoor storage is authorized.
- The storage area must be well ventilated and have no other hazardous materials stored in the area.
- No flammable materials must be stored in the area near the LABs. The storage area must be a non-smoking area.
- LABs must be placed on pallets.
- Areas that are subject to flooding must be avoided when choosing an appropriate storage area for LABs. Flooding could cause leaching of sulfuric acid.
- A portable eyewash station must be available in case of an emergency situation in which acid comes in direct contact with the eyes.
- Sand and sodium carbonate are necessary in case of an acid spill. These materials neutralize the acid. The sand and sodium carbonate canisters will be stored adjacent to the unauthorized waste storage area on the loading floor.
- Hazard signs (CORROSIVE MATERIALS and NO SMOKING) must be posted in conspicuous places at the location as warning.
- The Material Safety Data Sheet (MSDS) provides the information in case of an emergency and must be placed in the MSDS folder, which is to be placed in the Facility Supervisor's office.

When a LAB is stored, the labeling requirements of 6 NYCRR Part 374-3.2, Standards for Small Quantity Handlers of Universal Waste, must be followed, including the following:

- Each used battery or each storage container of batteries must be clearly labeled as “Universal Waste Batteries,” “Waste Batteries,” or “Used Batteries”; and
- The beginning date of storage must be clearly posted on each battery or storage container of batteries. The maximum storage time for LABs at the MTS is one year.¹

LABs found in the MTS are to be placed in a designated storage area for a maximum storage period of one year. Any employee who handles LABs must wear appropriate PPE, including gloves and eye protection.

6.2.5 Regulated Medical Waste (RMW)

RMW delivered to the MTS will be handled in the same manner as other unauthorized waste; however, a specific RMW contractor will be engaged through EPU to provide proper handling, transport, and disposal of RMW. RMW will be removed from the facility within 72 hours as mentioned in Section 6.2.1, General Procedures for Managing Hazardous, Dangerous, or Illegal Unauthorized Waste. The current RMW contractor is listed in Section 6.2.1.

Should any MTS employee be punctured by RMW material or otherwise be exposed to RMW-related bloodborne pathogens, immediate medical attention for the employee will be sought.

The handling and management of infectious waste or RMW will be conducted in conformance with Occupational Safety and Health Administration (OSHA) Standards, including 29 CFR 1910.1030, Bloodborne Pathogens, and the requirements of 6 NYCRR Part 360-10, Regulated Medical Waste Storage, Transfer, and Disposal.

6.2.6 Asbestos-Containing Waste

Asbestos-containing waste, as an unauthorized waste, would be managed and removed from the facility within 72 hours as described in Section 6.2.1, General Procedures for Managing

¹ Lead acid batteries (LABs) are to be managed as universal waste in a manner consistent with 6 NYCRR Part 374.3, Standards For Universal Waste. Removal of LABs from the MTS to the DSNY Central Repair Shops would be incorporated into the as-needed LAB collection managed by the DSNY Bureau of Cleaning and Collection (BCC) for DSNY facilities.

Hazardous, Dangerous, or Illegal Unauthorized Waste. Due to the occupational health risks associated with asbestos exposure, additional procedures would be implemented to ensure the safety of personnel, and these are discussed below.

In the event that a substance known or suspected of containing asbestos is observed as it is being dumped or after it has been dumped from any vehicle (DSNY or private), the following will be enacted:

MTS Worker

A MTS worker who witnesses a violation should do the following:

- Avoid physical contact with the substance in question.
- Observe where the material was dumped, by whom, the vehicle identification, and the estimated quantity of material. Such observation shall be made with caution and utmost regard for safety.
- Ask the individual dumping the suspected material for its origin.
- Isolate the area with the suspected material so that it will not be contaminated from other sources and so that it does not present a health concern.

Location Supervisors

The Location Supervisors shall do the following:

- Contact his or her respective Division Director and OCO immediately.
- Gather all relevant information on the possible source of the asbestos-containing materials (i.e., name of company, license plate, and origin of material).
- Isolate the area that contains the suspected asbestos material, cordoning it off with cones, tape, rope, etc.
- Wet down the material with a fine water spray or mist to prevent the material from blowing or spreading. After the material has been wetted, cover it with plastic sheets or any covering available at the facility. The covering should be held down by dirt, rocks, or heavy objects to ensure that material will not become airborne and that the cover will not be blown off.
- **DO NOT REMOVE** the suspected asbestos material from the location without proper authorization from the DSNY Safety Division or EPU.

- Follow guidance of the DSNY Safety Division or EPU as to the proper handling and disposal of the suspected material.
- Properly clean any equipment that comes in contact with asbestos prior to future usage.

Operations Control Office

OCO shall do the following:

- Notify the Director/Deputy Director of SWM (Bureau Headquarters).
- Notify EPU. EPU is on call 24 hours a day, 7 days a week.
- Ensure that the DSNY Safety Division has been notified by the field location.
- Contact a Location Supervisor to inform him or her of the approximate arrival time of the DSNY Safety Division and EPU representatives to the SWM facility incident location.
- Obtain a complete assessment of the potential hazard from a MTS Location Supervisor.
- Notify the members of EPU and DSNY Safety Division response teams.
- Evaluate the impact of workplace operations and, if necessary, develop alternate plans to minimize interference with daily operations.
- Notify labor unions representing work site employees as directed by the SWM Director.

Environmental Police Unit

EPU shall do the following:

- Conduct an on-site evaluation of the asbestos incident, determine its impact on the work site operation, and report findings to the appropriate Chief or Bureau Director or his or her designee.
- Issue a hazardous log number.
- Isolate the material and work area.
- Inspect the material and work area.
- Implement preliminary abatement control.

- Brief and explain any abatement measures that are deemed necessary to the appropriate Chief or Bureau Director or his or her designee from the involved Bureau.
- Collect a sample of the material.
- Conduct laboratory analysis of the sample.
- Confirm presence of asbestos in material.
- Make specific recommendations regarding the removal of the contaminated material.
- Report findings to the Bureau Manager or his or her designee.
- If necessary, confer with the Director of Asbestos Abatement in the Bureau of Engineering (who will be brought in by the Bureau Manager) to determine need to contact outside agencies, such as the HazMat Units from FDNY and NYCDEP. The Director of Asbestos Abatement, when necessary, will arrange for removal.
- If necessary, contact outside agencies and function as the primary representative of DSNY with units from other agencies, advising the Bureau Manager or his or her designee.

DSNY Safety Division

The DSNY Safety Division shall do the following:

- Assist the Bureau Manager to coordinate and monitor all support functions regarding the health and safety of all on-site personnel involved with the asbestos contingency plan.

All activities associated with the handling of asbestos-containing waste will be performed in a manner consistent with the following rules and regulations, as applicable and appropriate:

- USEPA 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants;
- United States Department of Labor OSHA 29 CFR 1910;
- NYSDEC Publication 6 NYCRR Part 360, Solid Waste Management Facilities;
- 6 NYCRR Part 364, Waste Transporter Permits and Tracking Requirements;
- New York State Department of Labor (NYSDOL), Industrial Code Rule 56 (Asbestos) regarding any handling of asbestos material that June result in the release of asbestos fiber;
- NYSDOH regulations covering exposure to asbestos, certification of professional

abatement contractors, and certification of laboratories; and

- NYCDEP local regulations regarding asbestos handling.

6.2.7 Non-Hazardous Unauthorized Waste

6.2.7.1 *Bulky Items, Tires, Oversized Materials, and White Goods*

DSNY will be responsible for the management of non-hazardous residue generated as a part of normal operations at the MTS. Roll-off containers will be maintained on the MTS loading floor in the event that any non-hazardous unauthorized waste is tipped at the MTS (see Figure 1 in Section 6.2.1 for location of the unauthorized waste roll-off containers). Front-end loaders will load such materials (e.g., bulky items, tires, oversize materials, white goods) into the roll-off container for eventual truck transport to an appropriate handling facility. Under rare circumstances where significant amounts of varied, non-hazardous unauthorized waste is delivered to the facility, DSNY June dispatch multiple roll-off trucks to the facility, as needed, to allow for the proper segregation and transport of materials. Non-metal oversized or bulky materials will be crushed by the front-end loaders into an appropriate size for containerization. These wastes will be stored on-site and hauled on an as-needed basis (e.g., when a roll-off container is full) or every ninety (90) days (per 6 NYCRR Part 360-1.14(e)(3)), whichever comes first.

The following vendors are under contract with DSNY for proper handling of the listed non-hazardous unauthorized waste materials:

Tires:
S & M Tire Recycling
228 Miller Avenue
Freeport, NY 11520
516-764-2950
1-800-640-9278

White Goods/Oversized Material:
Hugo Neu Schnitzer East
1 Linden Avenue East
Jersey City, NJ 07305
201-333-3131

Hugo Neu Schnitzer East
30-27 Greenpoint Avenue
Long Island City, NY 11101
718-786-6031

Bronx Metals Recycling (owned by Hugo Neu Schnitzer East)
850 Edgewater Road
Bronx, NY 10474
718-542-2300

Other NYSDEC-approved vendors June be employed as well.

Bulky items, tires, oversized materials and white goods will be held for no more than 90 days after discovery (Part 360-1 14(e)(3)).

6.2.7.2 *Construction and Demolition (C&D) Waste*

Unauthorized C&D waste from commercial and industrial sources will not be accepted at the MTS. Trucks carrying such material will be directed to leave the facility and deliver their material to an appropriately licensed facility. The MTS will, however, accept C&D waste materials collected by DSNY or other approved agencies or institutions. This C&D waste would primarily encompass residential-generated materials and materials from DSNY's self-help sites. If unauthorized C&D waste from commercial and/or industrial sources is unloaded at the facility, front-end loaders will load this material into the unauthorized waste roll-off maintained on the loading floor. The roll-off will then be transported to a licensed C&D waste management facility on an as-needed basis (e.g., when a roll-off container is full). C&D wastes will be stored on-site and hauled on an as-needed basis (e.g., when a roll-off container is full) or every ninety (90) days (per 6 NYCRR Part 360-1.14(e)(3)), whichever comes first.

The following two private facilities are contracted by DSNY to accept and properly manage C&D waste generated under emergency situations, including unauthorized C&D waste tipped at the MTS, as well as C&D waste generated from terrorist activities and building collapses:

Waste Management, Inc.
123 Varick Avenue
Brooklyn, NY 11237
(718) 386-7900

Zevel Transfer, LLC
620 Truxton Street
Bronx, NY 10474
(718) 991-7700

Other NYSDEC-approved facilities June be employed as well.

Waste Management Harlem River Yard
98 Lincoln Avenue
Bronx, NY 10454
718-401-4126

Interstate Waste Services
373 US-1 Truck Route
Jersey City, NJ 07306
Primary: 201-830-3269
Secondary: 866-392-5497

Flag Container Services
11 Ferry Street
Staten Island, NY 10302
718-720-4650

Action Environmental Services
930 East 132nd Street
Bronx, NY 10454
Primary: 973-623-7600
Secondary: 866-270-9900

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7.0 EMERGENCY PROCEDURES

7.1 Fire

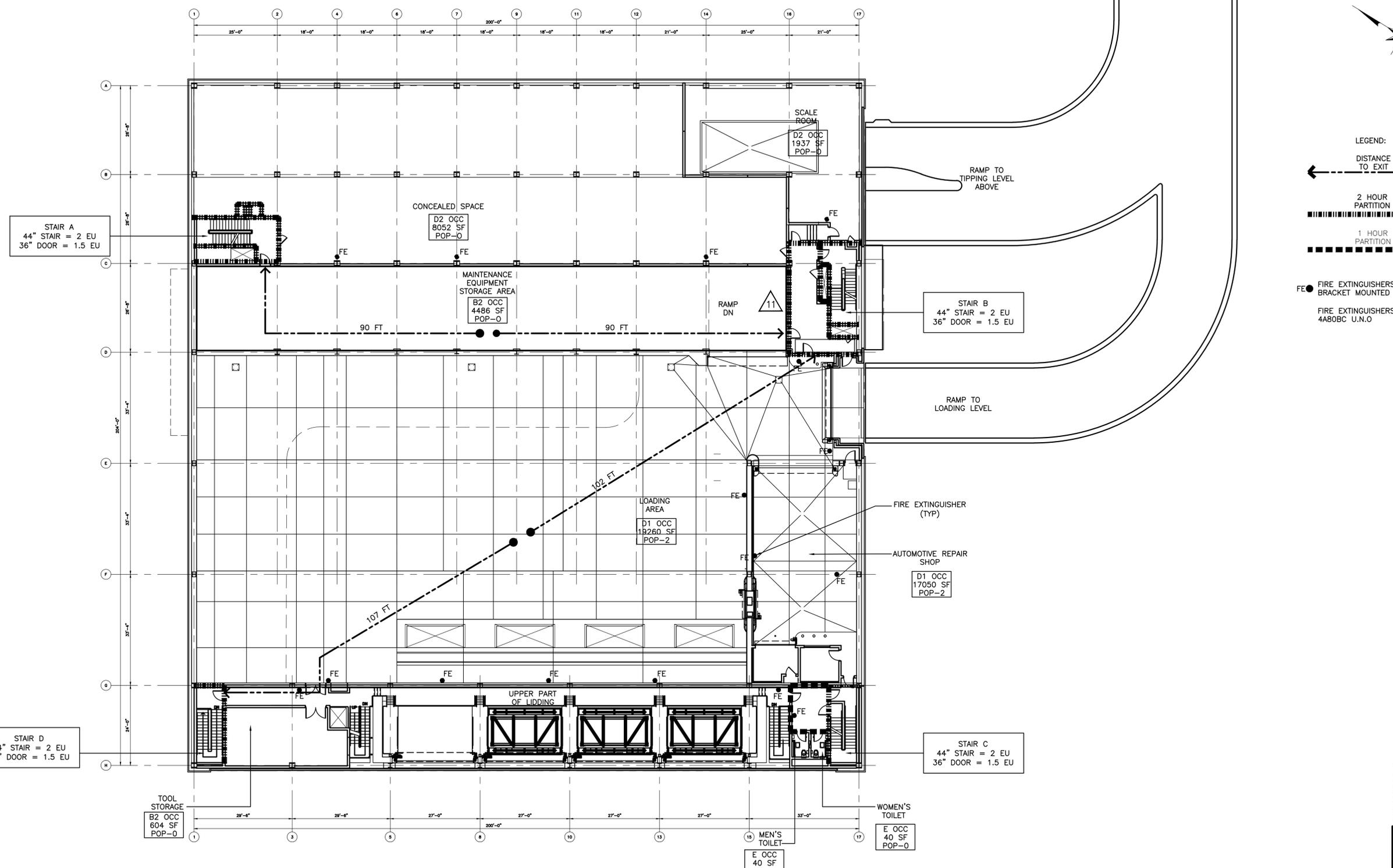
The purpose of these procedures is to outline the tasks to be followed by MTS personnel in the event of a fire at the MTS. The Emergency Coordinator (i.e., a Location Supervisor or his or her designee) is responsible for providing overall direction in responding to a fire event at the MTS. The Emergency Coordinator is also responsible for accounting for personnel at his or her MTS. The actions to be taken by various MTS personnel follow.

7.1.1 Emergency Coordinator Responsibilities

- Sound the fire alarm if it has not already been sounded.
- Make an announcement regarding the fire situation to MTS personnel using the Public Announcement (PA) system. Repeat the announcement three times at 20-second intervals.
- Notify OCO
- Provide directions regarding evacuation routes for non-essential MTS personnel. Specify the designated evacuation assembly areas (evacuation routes and evacuation assembly areas are represented in Figure 2 – Building Evacuation Plan and Rally Points.
- Report the fire incident to FDNY using the “911” emergency number or the appropriate local emergency number provided in Attachment 4, Coordinated Emergency Service Organization, to acquire assistance, as necessary.
- Secure Location Time Book, Telephone Order Book, Daily Blotter, and other on-site records.
- Direct MTS personnel to man and ready the fire hoses, extinguishers, and other fire safety-related equipment.
- Secure the electric room.
- Ensure that affected equipment and nearby equipment (e.g., cranes and mobile equipment) is shut down appropriately.
- Stop further entry of vehicular traffic onto the tipping floor.
- Remove front-end loader and excavator from the building, if possible.

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LEGEND:

DISTANCE TO EXIT

2 HOUR PARTITION

1 HOUR PARTITION

FIRE EXTINGUISHERS TO BE BRACKET MOUNTED U.N.O

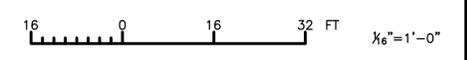
FIRE EXTINGUISHERS TO BE 4A80BC U.N.O

WARNING
 IT IS A VIOLATION OF SECTION 2209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY MANNER PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED, IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

1 EGRESS DIAGRAM - LOADING LEVEL
 A-004 SCALE: 1/16" = 1'-0"

FIRE EXTINGUISHER CALCULATIONS

	AREA SQFT	MINIMUM EXT. TYPE REQD	MINIMUM PROTECTED AREA PER EXT	HAZARD TYPE	No EXT REQUIRED	No EXT PROVIDED
PIER LEVEL	7823	2A	6000	LOW	1.3	2
OFFICE AREA	30528	2A	2500	MODERATE	12.2	13
INDUSTRIAL AREA						



GREELEY AND HANSEN
 111 BROADWAY, SUITE 2101
 NEW YORK, NEW YORK 10006

DESIGNED: RDP
 DRAWN: AA
 CHECKED: MK

APPROVED:

NO.	DATE	APPD.	REVISION

SCALE
 1/16" = 1'-0"



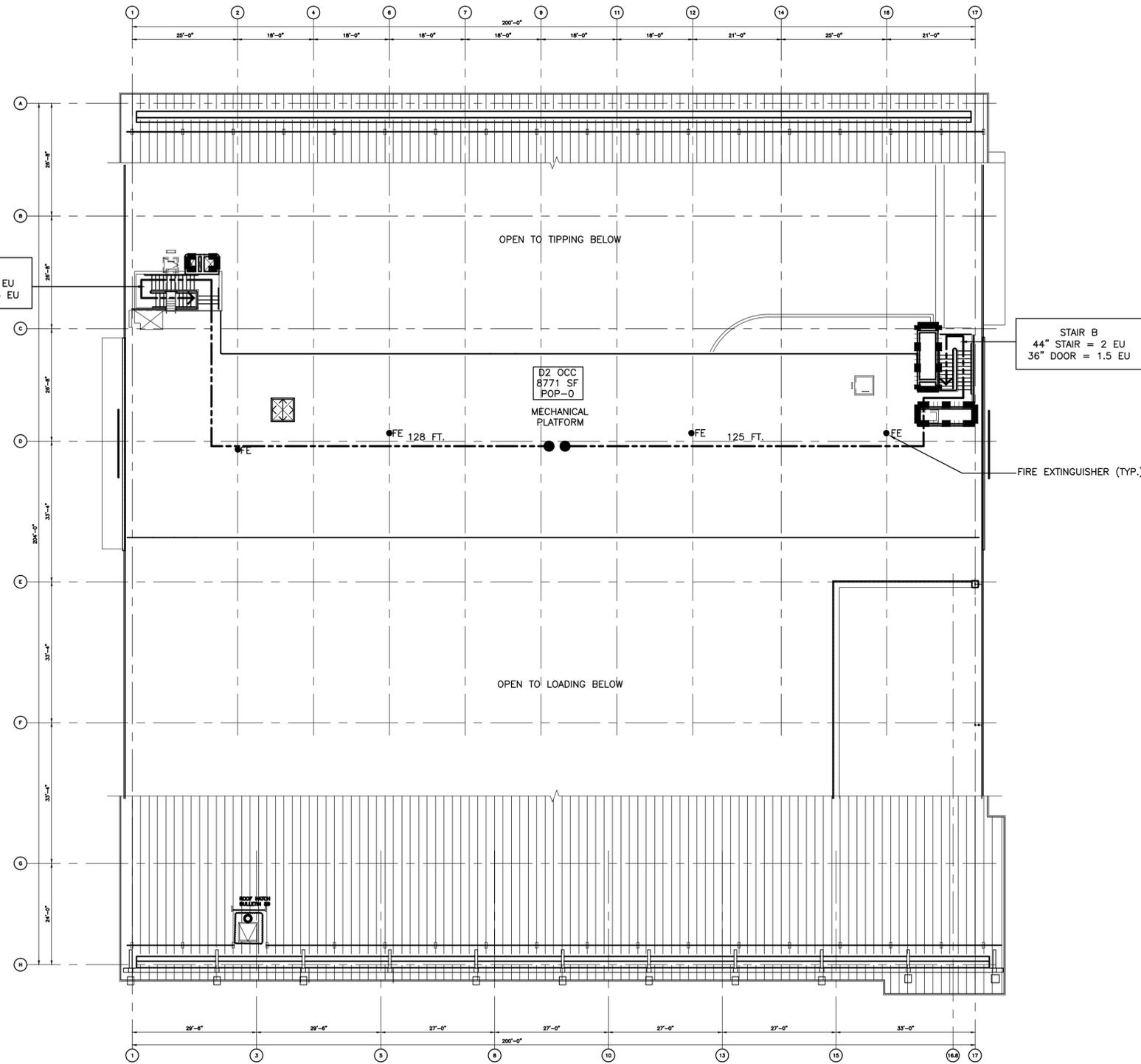
CITY OF NEW YORK
 DEPARTMENT OF SANITATION
 MARINE EXPORT OF SOLID WASTE
 SOUTHWEST BROOKLYN
 PART 360 PERMIT APPLICATION TRANSFER STATION

CONTRACT NO. 2
 ARCHITECTURAL
 EGRESS DIAGRAM LOADING LEVEL

FILE NAME: DSNFYA004_11
 DWG: A-004.11
 SHEET NO.: 94 OF 97
 DATE: SEPTEMBER 2017

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- LEGEND:
- ← DISTANCE TO EXIT
 - ▬ 2 HOUR PARTITION
 - ▬ 1 HOUR PARTITION
 - FE FIRE EXTINGUISHERS TO BE BRACKET MOUNTED U.N.O
 - FE FIRE EXTINGUISHERS TO BE 4A80BC U.N.O

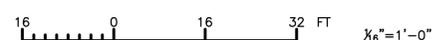
NOTE:
 OCC OCCUPANCY TYPE
 SF SQUARE FEET
 POP POPULATION

WARNING:
 IT IS A VIOLATION OF SECTION 2209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

1 EGRESS DIAGRAM - MEZZANINE
 A-006 SCALE: 1/16"=1'-0"

FIRE EXTINGUISHER CALCULATIONS

	AREA SQFT	MINIMUM EXT. TYPE REQD	PROTECTED AREA PER EXT	HAZARD TYPE	No EXT REQUIRED	No EXT PROVIDED
MEZZANINE						
INDUSTRIAL AREA	9450	2A	2500	MODERATE	3.78	4



GREELEY AND HANSEN
 111 BROADWAY, SUITE 2101
 NEW YORK, NEW YORK 10006

DESIGNED: RDP
 DRAWN: AA
 CHECKED: MK

APPROVED:

NO.	DATE	APPD.	REVISION

SCALE
 1/16"=1'-0"



CITY OF NEW YORK
 DEPARTMENT OF SANITATION
 MARINE EXPORT OF SOLID WASTE
 SOUTHWEST BROOKLYN
 PART 360 PERMIT APPLICATION TRANSFER STATION

CONTRACT NO. 2
 ARCHITECTURAL
 EGRESS DIAGRAM MEZZANINE LEVEL

FILE NAME: DSNYFA006_10
 DWG: A-006.10
 SHEET NO.: 96 OF 97
 DATE: SEPTEMBER 2017

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- Stop all container loading activities.
- Initiate Search and Rescue team formation and dispatch as necessary.

Provide details of the fire situation to on-site fire-fighting teams.

- Continue to coordinate fire-fighting activities until the fire is extinguished.
- Use the Unusual Occurrence and Accident Report form (Attachment 11) to record the fire information being reported.

7.1.2 General Facility Personnel Responsibilities

- In the case of a fire at the MTS, locate and pull the nearest fire alarm.
- Report the fire to the Emergency Coordinator.
- State your name and identify your present location in the MTS and the location and status of the fire being reported.
- Stay on the line for further instructions if the situation allows.

7.1.3 Non-Essential Personnel Responsibilities

- Listen for PA announcements.
- If so directed, proceed to the evacuation assembly area and report arrival.

It should be noted that these procedures will be instituted during open shifts. When the MTS is not open, the MTS worker on duty will be directed to notify FDNY and OCO (which is staffed by DSNY 24 hours per day, 7 days per week) to alert all personnel, if any; to secure the Daily Log, Telephone Order, and Location Time Books; and to await assistance.

7.1.4 Fire Drill Memorandum

During the first week of each month, MTS Supervisors are responsible for conducting a fire drill. After the fire drill is conducted, the officer in charge must document in the Daily Blotter that they have complied with this directive. The Daily Blotter will be checked to ensure compliance.

7.1.5 Fighting Container Fires

In the event of a container fire, DSNY personnel shall follow procedures as specified in the Fire Drill Chart posted in each MTS. The MTS Supervisor shall determine if cessation of any or all MTS operations is necessary. Fire stations are manned—flusher/water hoses/extinguishers—as appropriate to prevent the fire from spreading. Any fire originating on a loaded or partially loaded barge is subject to the following procedure:

- Notify OCO.
- Notify FDNY.
- Isolate the container (i.e., move to the container storage area).
- Control container fire by minimizing oxygen inside of the box (keep box closed, seal container vents) and reducing container temperature (spray container exterior with water). The MTS Supervisor shall coordinate all MTS efforts under the direction of FDNY upon arrival of FDNY personnel.
- If it is determined necessary, use water to extinguish the fire via the fire port, which is located at the center, near the top of the container.
- If possible, do not move the container to the barge until the fire has been extinguished.
- Record the occurrence in the order book and complete an Unusual Occurrence and Accident Report form (Attachment 11) and submit it to the SWM Operations Office in order to document the event.

7.1.6 Fire Fighting on Barges

The MTS transport and disposal contractor will be responsible for the fire-fighting on barges. The contractor will also be responsible for developing a barge fire-fighting plan that will be included in this Plan for review and approval by NYSDEC. Further information regarding fire-fighting on barges June be found in Volume 2, Appendix D – Transfer, Transport and Disposal Plan.

7.2 Explosions

The purpose of this section is to identify the typical crisis situation procedures to be carried out at the MTS in the event of an explosion and to define general steps to be taken if such a situation arises. The procedures are related to explosion threats (on and off property), covert bomb situations, and any general explosions associated with operations at the MTS.

Personnel involved in the Emergency Response Organization (Attachment 3) are outlined within the Contingency Plan. Most functions are not pre-assigned but have been defined as individual areas of responsibility. Specific functions June be activated at the discretion of the MTS Supervisor, designated as the Emergency Coordinator. The Emergency Coordinator is responsible for implementing this procedure.

Explosions could take place for many different reasons, including the intermixing of certain types of refuse or the receipt of unauthorized waste on the tipping floor or in containers. Other explosion risks could occur due to the existence of a bomb on the property or a covert bomb situation. A crisis situation is a situation that disrupts the normal operation of the MTS, personnel at the site, and personnel and the environment around the site location. The primary and common goals at all times under all crisis circumstances are safety and avoiding personal injury or property damage. In most crisis situations, effective control passes on to the local Emergency Response Teams for final resolution. The measures they take to avert the situation focus on avoiding or minimizing personal injury or property damage and on the well-being of the affected employees. The immediate steps taken by the Emergency Coordinator before the situation is turned over (to local law enforcement agency) adhere to the same principle so that the transition is smooth.

7.2.1 Explosion in a Container or Barge

7.2.1.1 *Emergency Coordinator Responsibilities*

Actions to be taken in the event of an explosion are as follows:

- Sound the emergency alarm.

- Ensure that the affected equipment and nearby equipment (e.g., mobile equipment) are shut down appropriately.
- Announce the situation at hand on the PA system and instruct that: (1) further entry of vehicular traffic onto the tipping floor cease; and (2) all container loading activities stop. Repeat the instructions three times at 20-second intervals.
- Provide directions regarding evacuation of non-essential personnel from the MTS.
- Perform personnel accounting.
- Report the emergency to the local police department or use the “911” emergency number for assistance, as necessary.
- Maintain contact with the personnel in the emergency area by telephone or handheld radio.
- Upon the arrival of the local Emergency Response Team, brief the responding emergency personnel of the situation and provide necessary assistance as requested.
- Account for all personnel that are assigned to your area at the assembly location.
- If any personnel have not been accounted for, provide the names and locations to which the unaccounted personnel were assigned and/or last seen.
- Record explosion information on the Unusual Occurrence and Accident Report form (Attachment 11).
- Further information regarding explosions in barges or containers June be found in Volume 2, Appendix D – Transfer, Transport and Disposal Plan.

7.2.1.2 General Facility Personnel Responsibilities

An explosion in a container or barge will be reported directly to the Emergency Coordinator. The person reporting the incident to a Location Supervisor will report the following:

- The time of explosion;
- The type of explosion (e.g., big bang, small fluttering noises);
- If a fire is associated with the explosion;
- If there is smoke associated with the explosion; and
- The type of damage, if any, to personnel and property.

7.2.2 Facility (On-site) Bomb Threat

7.2.2.1 *Emergency Coordinator Responsibilities*

Actions to be taken in the event of the receipt of a bomb threat are as follows:

- Immediately report the emergency to the local police department or use the “911” emergency number for assistance, as necessary.
- Take all necessary steps to preserve the safety of on-site personnel and MTS property. Evacuate all non-essential site personnel in such a manner as to prevent any threat to their safety.
- Upon their arrival, assist local Emergency Response Teams to help identify the caller and/or locate the potential bomb in the MTS.
- Minimize publicity. All announcements made over the PA system should be non-specific about the bomb threat.
- Establish security personnel at all entry and exit points that provide direct access to the bomb area, allowing access to emergency response personnel only. Control of these access points will be turned over to local Emergency Response Teams.
- Help establish a safe and effective area for medical and fire personnel and request that they remain on standby with the concurrence of the local Emergency Response Teams.
- If the bomb threat is determined genuine and a crisis situation develops at the MTS, immediately shut down the MTS and evacuate all non-Emergency Response Team personnel.
- Assist local Emergency Response Teams, as necessary.
- After a bomb threat has ended, prepare a detailed report of the actions taken during all phases of events using an Unusual Occurrence and Accident Report form (Attachment 11).

7.2.2.2 *General Facility Personnel Responsibilities*

An employee receiving a bomb threat call should do the following:

- Obtain as much information as possible from the caller with respect to the location and type of bomb. The type of bomb June aid in identifying the caller. Use the Unusual Occurrence and Accident Report form (Attachment 11) to record all caller information.

- Inform the caller that he or she (the employee) is not in a position to negotiate but June obtain a list of demands, if any. If possible, the employee should try to direct the caller to the Emergency Coordinator.
- Notify the Emergency Coordinator, SWM Headquarters, and OCO.
- If a bomb threat call involves a member of the employee's family, obtain as much information as possible from the caller and immediately report it to the Emergency Coordinator.

7.3 Releases

Noise, dust, and odor will be controlled by preventative measures as part of the MTS operating systems and procedures, as described in Section 4, MTS Operating Systems, of the main section of the Operation and Maintenance Manual. In the unlikely event of excessive noise, dust, or odor, the operating systems and procedures will be evaluated and corrected. For instance, the MTS doors will be closed when trucks are not being received to contain odor and dust, to increase the effectiveness of the negative air pressure system and ventilation system, and to dampen equipment-related noise. Other measures June include correcting the operation and use of the deodorant mist odor control system.

Leachate or other spills of non-hazardous or petroleum products would be collected within the facility's drainage system. These liquids would be routed through the on-site oil/water separation system before discharge to the municipal sewer system.

The remaining portions of this section are designed to provide information on emergency response to substance spills or atmospheric release. There will normally be no substances at the MTS considered hazardous, as defined by federal, state, or local regulations (e.g., RCRA, CERCLA, TSCA, or CWA), that could be spilled or released into the environment. However, certain substances at the site should be handled with caution, and emergency procedures should be followed in the event of their accidental release. Likewise, unauthorized materials that are hazardous June be inadvertently received by the MTS. General procedures to be implemented in the case of an accidental release for the following substances are discussed below:

- Hydraulic Oil; and
- Fuel Oil/Gasoline.

Spill releases June occur at an active site where light or heavy equipment is routinely used during the workday. In this regard, liquid fuel spills will be eliminated by frequent inspections and preventative maintenance to ensure that no leaks occur. Equipment retained on-site will be maintained within a secure area to minimize vandalism. In addition, fueling of stationary and/or mobile equipment June also be required on-site. This would be conducted in accordance with applicable rules and regulations. As appropriate, locking or quick-release mechanisms will be utilized for fueling or equipment.

The Emergency Coordinator is responsible for providing overall direction in response to a release (i.e., liquid or gaseous) at the MTS and for contacting OCO. Supervisors are responsible for accounting for personnel in their areas. OCO is responsible for contacting EPU. EPU will contact release response teams from NYCDEP or private contractors, as necessary, to contain the spill and perform cleanup activities. The Emergency Coordinator and the EPU will also ensure that spent material used to contain and clean spills will be managed through the existing handling procedures for wastes inappropriate for disposal as solid waste as described in Section 6.2, Unauthorized Waste (unauthorized waste contractors and laboratories are listed in Attachment 7). If the spill incident results in employee injury, “911” will be dialed to ensure that appropriate medical care is obtained.

The actions to be taken for various conditions follow.

7.3.1 General

In the case of minor spills, such as small amounts of spilled oil during equipment maintenance, the Emergency Coordinator will locate the source of the leak and then will direct MTS workers in the following procedures:

- After personnel safety, immediately contain and limit the spread of the spilled substance;
- Stop, contain, and perform a complete cleanup of the leak source;
- Use absorbent material, sand, or other appropriate means to soak up the spilled liquid, contain, and provide for proper disposal;
- Stop all drains in the area, if necessary;

- Construct a temporary berm to contain the spill if an outside spill spreads to a surrounding land surface; and
- Collect contaminated soil with a front-end loader or other equipment.

In the case of major spills, the Emergency Coordinator will be responsible for notifying the appropriate entities and coordinating the efforts of MTS workers and any spill cleanup personnel, as follows:

- The Emergency Coordinator will be responsible for notifying OCO, as appropriate. OCO will notify EPU, and EPU will be responsible for contacting NYCDEP or a private contractor to contain the spill and perform cleanup activities.
- If the incident results in an injury, the Emergency Coordinator will notify Emergency Medical Services by calling “911.”
- After personnel safety, MTS workers’ immediate initial spill response effort will be to contain and limit the spread of the spilled substance.
- After initial notification, the first priority is to stop the source of the leak. All efforts are directed to contain the leaked substance, depending on its type, after stopping the leak or during the process of stopping the leak. The cleanup is initiated immediately after stopping the leak and upon containment of the substance.
- When securing the source of the spill, all efforts will be directed toward limiting environmental contamination:
 - A temporary berm should be constructed if containment structures fail. Stop all drains in the area, if possible.
 - If an outside spill spreads to a surrounding land surface, construct a temporary berm to contain the spill.
 - Contaminated soil can be collected by a front-end loader or other equipment.
 - Place sand or an alternative available absorbent material around and on the spill that is inside of the building to prevent spill migration to other areas.
- The spill cleanup personnel are to follow prescribed procedures for the substance. The Emergency Coordinator will verify that the cleanup is complete and then inspect the surrounding area or collection system adjacent to where the spill has occurred. It is also essential to verify that there are no drains or other locations within the MTS

that could carry the spill to another area.

- In the case of spills that could result in a spilled substance entering the water, OCO or SWM will notify a private contractor to deploy an emergency boom and to stand by for potential cleanup of the spill should it reach water. DSNY maintains an emergency boom deployment contract for such a purpose.
- Spill cleanup personnel will clean all protective equipment used in the cleanup.
- The Emergency Coordinator will prepare a spill history report as described in Section 8.0 of this Contingency Plan.
- The Emergency Coordinator will notify NYSDEC Division of Spills (718-482-4929) of the spill incident.
- MTS workers will record information regarding the spill incident in the Unusual Occurrence and Accident Report form (Attachment 11).

The spill containment/cleaning material/equipment will be stored in the enclosed maintenance area located on the loading floor. For the exact location of the unauthorized waste storage area, please see Figure 1 in Section 6.2.1.

7.3.2 Spill Response Teams

Spill Response Team personnel shall respond to a substance spill as follows:

- Don appropriate protective clothing.
- Proceed to the spill location as directed by the Emergency Coordinator.
- Confirm and immediately secure the source of the spill.
- Secure all drains in the area to minimize spill migration.
- Contain the spill with a temporary berm or other impermeable barrier.
- Use absorbent material to soak up the spill. The material should then be loaded by shovel or front-end loader into appropriate containers for disposal.
- Wash cleanup equipment free of oil or other spilled material.

7.3.3 Spill Containment

After personnel safety, the immediate initial effort will be conducted by EPU to contain and limit the spread of the spilled substance. The Emergency Coordinator on duty at the time of the spill, or his or her counterpart, must give utmost priority to the spill. He or she must locate the source of the leak and ensure that EPU stops, contains, if possible, and performs a complete cleanup.

The following steps will be taken to contain the spill outside or within a building:

- Stop all drains in the area, if possible;
- Construct a temporary berm to contain the spill if an outside spill spreads to a surrounding land surface;
- Collect contaminated soil with a front-end loader or other equipment;
- Place sand or an alternative available absorbent material around and on the spill that is inside of the building to prevent spill migration to other areas; and
- Notify NYSDEC's Division of Spills of the release.

7.4 Storms and Adverse Weather Conditions

Under certain conditions, normal operations at the facility June be impacted by extreme weather. Forecasts of impending inclement weather are conveyed to the field locations through the DSNY teletype information system. Storm warnings include high winds, below freezing temperatures, and more. When severe weather is expected, a site tour should be conducted in advance to perform the following measures, as applicable, which include but are not limited to:

- Cease accepting waste up to 48 hours in advance of the storm;
- Containerize and ship out all waste in the facility;
- Remove all containers from the pier deck;
- Remove all staged barges from the facility;
- Store shuttle cars on raised cribbing;
- Activate pre-existing contract with vendor to raise drive motors on one (1) gantry crane;

- Apply waterproofing material to drive motors on the other gantry crane as well as capstans;
- Install flood log panels on all exterior doors;
- Install bladders in key drainage lines to prevent back-up flooding;
- Secure all critical interior rooms with watertight doors;
- Deploy sump pumps in predetermined locations;
- Run a systems check on the main generator;
- Conducting snow and ice removal;
- Using salt and abrasives on all surface roadways and ramps;
- Performing preventative maintenance on all mechanical equipment;
- Inspecting stormwater drainage systems and performing clean-out, if required, to prevent or minimize flooding;
- Disassemble or secure all outdoor scaffolding;
- Stock food and beverages at the facility should the weather impact transit; and
- Adequately staff the facility to safely shut down the plant, operate in “island mode,” or conduct adequate casualty control.

Under severe weather conditions, no collection will take place, and thus, no alternative handling system is needed. High winds will prompt a shutdown of the gantry cranes as per manufacturer’s recommendations and design. Gantry cranes will be locked out and secured. Additionally, high winds and storms June prohibit tug boat transport along designated waterways. In a disaster situation, state of emergency rules will apply. Flood mitigation measures to protect equipment outside the building is necessary, since the entire facility at the Southwest Brooklyn MTS is in Zone 1 of the Superstorm Sandy revised flood elevation. Further information regarding procedures to implement during severe weather conditions June be found in Appendix D – Transfer, Transport and Disposal Plan. When given advanced notification of an event that June disrupt service at the facility, DSNY and the Transfer and Disposal Contractor will:

- Notify the City’s designated primary Contact of event;

- Notify all subcontractors, and provide their appropriate planning and response;
- Secure, protect and catalog equipment at the MTS;
- Catalog equipment in transit and in storage;
- Mobilize equipment, with sub-contractor, to position for safety; and
- Station equipment for accessibility post event.

Following an extreme weather event, procedures to follow include but are not limited to:

- Perform a damage assessment of structure and all building systems;
- Remove waterproofing material from gantry crane and capstans;
- Vendor lowers and reconnects drive motors on gantry crane;
- Re-install shuttle cars onto rails;
- Remove bladders from drainage lines;
- Remove flood log panels;
- Re-open watertight critical interior rooms;
- Coordinate with vendor to have barge/ empty containers brought to the facility; and
- Resume operations.

Please see below for emergency contact information for the Southwest Brooklyn Marine Transfer Station:

Event	Government Body	Phone Number
FIRE	NYC Fire Department Engine 253 2429 86 th Street and 24 th Avenue Brooklyn, NY 11204	718-999-4444
ACCIDENT	NYC Police Department 60th Precinct 2951 West 8 th Street Brooklyn, NY 11224	718-946-3311

MEDICAL	Victory Memorial Hospital 699 92 nd Street Brooklyn, NY 11228	718-368-1170
MARITIME	US Coast Guard Atlantic Area First District Activities New York 212 Coast Guard Drive Staten Island, NY 10305	Primary: 718-354-4037 Emergency: 718-354-4353

7.5 Equipment Breakdown

DSNY has established general procedures for handling the breakdown of various types of on-site equipment. In the event of a scale breakdown, estimating charts will be used to calculate waste flow. The Bureau of Building Maintenance (BBM) will be called in to perform repairs, when needed.

The transport and disposal contractor will be responsible for pier level operations and will perform repairs, when needed, to the pier level equipment, such as gantry cranes and marine hardware. If a barge handling winch breaks down, the barge will be moved by tugboat.

If the primary radiation detection system fails, mounting posts for portable radiation detectors (Thermo Electron Model LFM-2) will be positioned at approaches to the scales. The portable radiation detectors are quickly installed with an audible alarm box in the scalehouse.

If mobile equipment breaks down, then substitute equipment will be brought in from off-site facilities. Sufficient equipment will be maintained within the City-wide system to allow for the replacement of inoperable mobile equipment and will address the temporary closure of the MTS through its redundant waste handling capacity at other TSs.

Adequate equipment will be maintained at the MTS at all times for the proper function of MTS operations. In addition, as outlined in Attachment 1 the 24:00 to 08:00 shift will have a mechanic on duty to provide for routine on-site maintenance and repair of mobile and stationary equipment, including regular preventative maintenance and other necessary repairs. All

equipment will be maintained in good working order, and the MTS will be operated in accordance with the terms of the permit.

The MTS has also been designed with redundant stationary equipment systems to mitigate the impact of equipment breakdown. Two gantry cranes will be maintained on-site by the selected transport and disposal contractor, although only one is required to operate the MTS at peak capacity. Four hydraulic lift spreaders will be maintained on-site, although only three are required to operate the MTS at peak capacity. In addition, four container car pulling systems will be maintained with only three necessary during peak waste deliveries. DSNY will also maintain the ability to bring in vendor mechanics and repair personnel for significant stationary equipment failure and repairs, as necessary and required.

7.6 Facility Shutdown

7.6.1 Operational Failure

The MTS is equipped with an operational dust suppression spray system and exhaust/ventilation fans. Procedures are also in place to minimize operational interruptions during odor and pest control measures. MTS personnel are issued safety equipment, such as face masks, goggles, and earplugs, for personal protection. In the event that conditions such as dust, odor, and vectors (which have never previously caused a shutdown at a DSNY TS) require the shutdown of the MTS, container loading will be ceased until the condition is mitigated. In the event of a prolonged shutdown, solid waste will be diverted to other TS locations available to DSNY. Likewise, in the rare instance of catastrophic failure of critical stationary equipment that would prohibit the normal operation of the MTS, solid waste would be routed to other TSs or private transfer stations until the situation is resolved (see Section 7.5, Equipment Breakdown, and Appendix E – Certification of Disposal Capacity). DSNY will notify NYSDEC if any enactment of the Contingency Plan occurs or if any changes are proposed to the Contingency Plan. Contingency plan revision procedures are included in Section 1.4, Plan Maintenance, and NYSDEC notification procedures relating to the discovery of hazardous, dangerous, or illegal unauthorized waste are provided in Section 6.2.1.

Under certain circumstances the MTS June also receive waste from Secondary Wastesheds.

These circumstances June involve other waste facilities experiencing excess waste and/or shutdown. Facility shutdown June occur when any circumstance that June disrupt the operation of the facility, including but not limited to emergency shutdown, excessive receipt of waste and road closures occur. Under these circumstances, the Operations Control Office (OCO) will coordinate the waste distribution between all MTSs and/or private transfer stations. The means of managing the Secondary Wasteshed will differ on a case-by-case basis; however, the OCO will consider, among other things, surplus capacity, traffic congestion and transportation availability in determining the distribution of the wasteshed deliveries.

This procedure will be governed by the hierarchy of decision rules listed below:

- i. The bypass waste will be redirected to the nearest DSNY long term export facility(ies) (inclusive of both Converted MTSs and private transfer stations under contract to DSNY) with available capacity to process the bypass, within applicable permit limits.
- ii. If there is insufficient capacity to process the bypass under rule i, DSNY would notify NYSDEC of the upset condition and designate the Converted MTS(s) that would receive bypass under the upset conditions established in the permit. This assumes that the permit has conditions that allow a facility upset event to be addressed as a special circumstance.
- iii. If there is insufficient capacity to process the bypass under rule ii (a condition that is likely to reflect an event, such as a snow emergency), DSNY would notify NYSDEC that it would exercise the Emergency Condition Limit of the permit allowing it to operate several MTSs at a daily throughput of 5,280 tons for a limited period of time. This assumes that the permit has conditions that allow an Emergency Condition event to be addressed as a special circumstance.
- iv. If there is insufficient capacity to process the bypass under rule iii, DSNY would invoke the interruptible provisions of the arrangements that are anticipated to apply to processing Commercial Waste at the Converted MTSs, notifying the required number of commercial carters that they cannot tip at one or more Converted MTSs, thus using this freed up capacity for its own waste.

Rule iii (Emergency Condition), above, June be invoked before all available MTS facilities have maximized their upset condition (rule ii) if traffic transportation conditions are such that the delivery of waste to a distant MTS with available upset capacity would impede DSNY's timely

response to an Emergency Condition. DSNY would then invoke an Emergency Condition (rule iii), enabling it to use emergency capacity at a nearby MTS and thereby to resolve the emergency more quickly. For example, if during a post-holiday peak day an emergency caused a complete shutdown of the East 91st Street MTS and both Hamilton Avenue and North Shore were running close to their permitted capacity but Southwest Brooklyn was not, then DSNY would invoke an Emergency Condition (rule iii) to deliver East 91st Street waste to North Shore first and then Hamilton, which are much closer than Southwest Brooklyn. The Emergency Condition (rule iii) will only be invoked until such time as the upset condition (rule ii) would be sufficient to deal with the particular situation, subject to traffic transportation and other logistical concerns.

The permitted Weekly Limit would not constrain waste deliveries to an MTS under an upset or condition Emergency Conditions. The Weekly Limit derives from waste generated within the specific MTS wastesheds. An upset condition or Emergency Condition addresses the delivery of waste to an MTS from outside its wasteshed because of an upset or emergency affecting another facility or because several days of waste collections have accumulated uncollected on city streets as the result of the necessary diversion of Sanitation collections vehicles to plowing operations. In these circumstances it is likely that the Weekly Limits would be exceeded for the duration of the upset condition or Emergency Condition.

7.6.2 Emergency Shutdown Procedures

DSNY will ensure that the MTS is secured so as not to permit unauthorized public access to the site in order to eliminate the potential for illegal dumping for the duration of the MTS shutdown. All barges containing solid waste that remain at the MTS at the time of shutdown will be transported within a 24-hour period. DSNY personnel will remain assigned to the MTS to implement any required maintenance activities necessary to ensure that the MTS does not impact requirements of the permit and/or solid waste regulations. Procedures addressing maintenance for extended shutdowns are addressed in Appendix G – DSNY Closure Plan.

7.7 Terrorism Threat

Previously described emergency procedures will be enacted as a result of terrorist threats or situations caused by terrorist activities. The general emergency procedures (e.g., Emergency

Response Organization, coordinated emergency services listings, training) are described throughout this Contingency Plan. The following sections address the general procedures to be followed to address potential emergencies that could arise at the MTS as a result of terrorism threats or activities:

- Section 6.2 Unauthorized Waste;
- Section 6.2.2 Radioactive Waste;
- Section 6.2.3 Bioterrorism Waste;
- Section 7.1 Fire;
- Section 7.2 Explosions;
- Section 7.2.2 Facility (On-site) Bomb Threat;
- Section 7.3 Releases;
- Section 7.6.2 Emergency Shutdown Procedures;
- Section 7.9 Evacuation Plans; and
- Section 9.1 Internal Communications.

In addition, the City is currently developing a City-wide emergency response plan. The plan will describe the role of DSNY and other City agencies in the event of a City-wide emergency, including notification and coordination responsibilities with other City, state, and federal agencies. Although the MTS and its staff would not necessarily be directly involved in a response to a City emergency, the plan would delineate the chain of command and responsibilities to which DSNY and other agencies would adhere should such need occur. Emergencies addressed in the plan June include catastrophic events such as the World Trade Center attack or natural disasters that result in the destruction of buildings, massive damage to the surrounding community, and/or large amounts of debris.

7.8 Post-Emergency Cleanup

Cleanup procedures are to be performed as noted in Section 7.3. However, general guidelines for the post-emergency procedures and the cleanup of the MTS event area and emergency equipment, performed by EPU, are as follows:

- All efforts shall be made to prevent the spread of any spilled solid, liquid, or airborne substance to other parts of the MTS, either via drainage systems, personnel clothing, or otherwise;
- • Cleanup procedures shall commence only after the spill area and the spill have been isolated and the substance contained;
- All efforts shall be made to keep the cleanup efforts within a predetermined area by placing a temporary barrier around the event area;
- Emergency equipment, such as protective clothing, breathing apparatus, shovels, and front-end loaders, shall be washed thoroughly after the spill cleanup operation is completed;
- Wastewater, solid waste, accident debris, and other products of the release, accident, or cleanup shall be disposed of in an appropriate manner, consistent with the material released;
- Following an emergency incident, all emergency response equipment shall be cleaned and made fit for reuse, or replaced as necessary, as deemed by the Emergency Coordinator and/or EPU;
- An inspection of all equipment by the Emergency Coordinator and EPU shall take place before normal operations resume to ensure that each item is in proper working order; and
- Remedial activities, as a result of this inspection, shall include recharging fire extinguishers, restocking first aid kits, replacing personnel protective gear, and restocking other disposable items, as necessary.

7.9 Evacuation Plans

In the event that it becomes necessary to evacuate the MTS, an announcement will be made over the PA system and a warning horn will be sounded. All non-essential personnel will be directed to leave the MTS via evacuation exits and the MTS access ramp and directed to a safe evacuation assembly area. Immediate steps to prevent further access to the MTS will be taken.

Facility assigned personnel will report to the MTS Location Supervisor's office for further direction. Designated evacuation routes and evacuation assembly areas are shown in Figure 2 – Building Evacuation Plan and Rally Points in Section 7.1.1.

Evacuation of the MTS will be accomplished in cooperation with City officials and the local fire and police departments. The entrance/exit points will be closed and locked pending final determination of the acceptability of re-entry into the MTS through a joint determination by City and state officials.

If additional steps are needed to evacuate the immediate businesses or residences in the vicinity of the MTS, City and borough public safety and police officials will do so through door-to-door notification.

7.10 Sunken Vessel Procedures

In the event that a barge sinks, the transport and disposal contractor's personnel are required to implement their Sunken Vessel Procedures. Further information regarding sunken vessel procedures can be found in Volume 2, Appendix D – Transfer, Transport and Disposal Plan, Section 3.7. In addition, DSNY Sunken Vessel Procedures are included as Attachment 12 to this Appendix.

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8.0 RECORDS

The MTS Supervisor (i.e., Emergency Coordinator) in charge at the time of an incident must note in any operating record the time, date, and details of any incident reported that June require implementation of the Contingency Plan, as stated herein. The report must include the following:

- The name, address, and telephone number of the operator and the MTS;
- The date, time, and type of incident (i.e., fire, explosion, release, or other);
- The type and quantity of materials involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment;
- The estimated quantity and disposition of solid waste, liquids, or material recovered that result from the incident; and
- The steps taken subsequent to the incident to prevent its recurrence.

Records will be kept of any and all accidents or incidents that occur on-site at the MTS for a period of seven years following the end of the year to which they relate, in accordance with Title 29, Part 1904.6 of the Federal Labor Laws and to comply with the provisions of 6 NYCRR Part 360-1.14(i). The MTS Location Supervisor will also provide an annual summary of occupational injuries and illnesses at the MTS, as described in Title 29, Part 1904.5. All on-site accidents will be reported to a Location Supervisor immediately. The Location Supervisors will be responsible for completing an Unusual Occurrence and Accident Report form (Attachment 11), providing a detailed description of the accident or incident in accordance with DSNY's safety rules and regulations. A copy of this report will be kept on-site at the MTS.

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9.0 EMERGENCY EQUIPMENT

The MTS will have an internal communications system capable of providing immediate emergency instructions to all personnel.

Telephones capable of summoning emergency assistance from local police and fire departments will be available, and the telephone numbers for local emergency response agencies will be conspicuously posted near all telephones at the MTS. Handheld communication devices will be used to ensure that employees are in contact with and relaying information and/or instructions to emergency response personnel. No compatible radio frequencies are established with outside local emergency service groups for notification purposes. A PA system will be employed as well. Pull boxes will be located throughout the facility. The pull boxes engage an alarm system that sounds a distinctive audio signal and notifies all MTS personnel of the potential emergency condition.

9.1 Internal Communications

Emergency communication devices will be located throughout the MTS to provide immediate access for all personnel involved in the operation of the MTS. Four types of communication systems are available within the MTS: pull boxes, handheld communication devices, a PA system, and/or internal intercoms. Telephones will be located in the administrative area as well as on each level of the MTS facility. Other types of communication June also be put in place.

9.1.1 Page/Party (Public Announcement) System

The design of the intercom system (i.e., a public announcement system) includes the location of speakers in all areas of the MTS. The system provides the following capabilities: (1) page channel for broadcasting speech over a speaker system; (2) a party line channel(s) for two-way conversation; and (3) an interface to the telephone system.

9.2 Fire-Fighting Equipment

No open burning will be permitted at any time at the MTS. Access to the facility will be maintained at all times for firefighting and emergency response equipment. Access to the site

from the two entrances along Southwest Brooklyn will be open to admit fire-fighting equipment. The main entrance is on 25th Avenue and the secondary entrance is on Bay 41st Street. In the event of an emergency that requires the evacuation of the MTS, operators will activate the alarm and supervisory personnel will verbally direct employees to posted evacuation routes.

As shown in the Utility Plan (see Appendix I – Engineering Drawings, Drawings C-22, C-23 and C-24), fire hydrants are located on-site. Two are located on the north east corner of the parking lot and two are located on the south side of the parking lot. Another fire hydrant is located on the near the ramp to the pier level. “No Smoking” signs shall be posted in accordance with City and DSNY requirements in the processing building. Outdoor operations are restricted to weighing of DSNY collection vehicles, container lidding, and container transporting. All waste tipping, processing, and loading of containers will be conducted within the processing building. All exterior paved areas will be swept daily to capture loose litter that June escape the enclosed facility.

A dry sprinkler system has been installed in the processing and maintenance buildings. The system has been designed in accordance with the requirements of the City Building Code and the guidelines of the National Fire Protection Association (NFPA 13). As shown in the Fire Protection Plan (see Appendix I – Engineering Drawings, Drawings P-201 through P-240), there are fire hose cabinets located at 9 different locations throughout the processing building, with five branching off of each dry pipe riser. Siamese fire department connections are located on each corner of the building (see drawing P-210 and P-211). There is a fire pump and meter room on the pier level. As indicated in the HVAC Plan (see Appendix I – Engineering Drawings, Drawings H-001 through H-207), exhaust fans and roof vents are provided for adequate purging of smoke. Water is supplied to the building via two eight-inch mains, as shown in the Site Utility Plan (see Appendix I – Engineering Drawings, Drawings C-22 through C-26). “No Smoking” signs will be posted as required. Manually operated fire alarm boxes are located throughout the facility.

Periodic inspections of the serviceability of portable extinguishers and an annual maintenance check of fire extinguishers by a qualified vendor will be performed. In addition, periodic inspections of areas known to be fire hazards will be performed. Employees will be informed

verbally and with posted signs of the fire hazards in their area or job duties. The Fire Prevention Program includes procedures for notifying workers and FDNY in case of emergency, fire extinguisher usage training, and a posted evacuation route. See Appendix A – Training Plan for details regarding training requirements at the MTS.

9.3 Emergency Generator

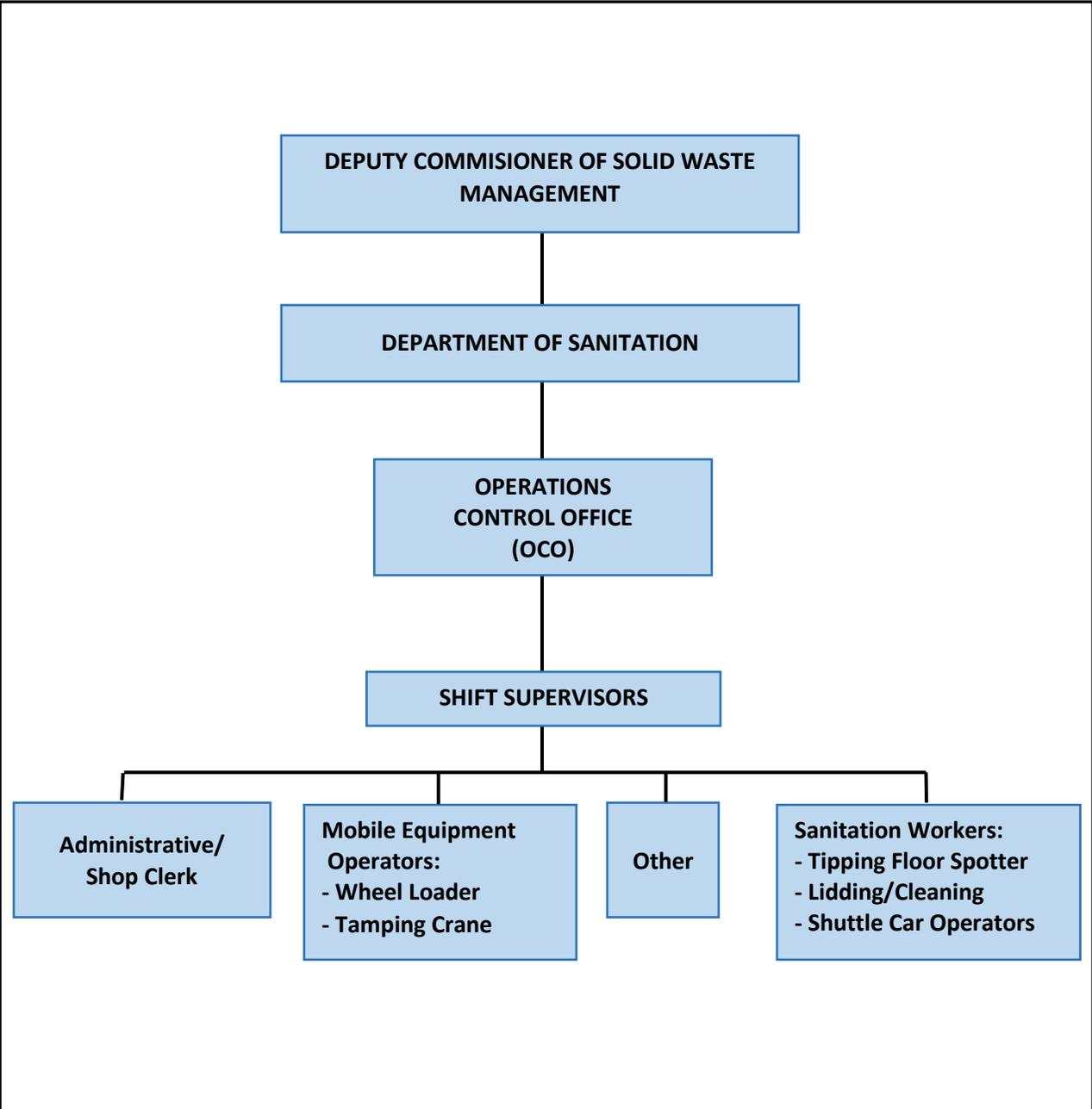
During a power outage, an emergency generator will be used to supply the lights and ventilation system and allow personnel to power down the equipment and secure the MTS. Emergency generator specifications can be found in Volume 3 of the Operations and Maintenance Manual, Attachment 16 — Emergency Generator.

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ATTACHMENT 1

NORMAL MTS STAFFING ORGANIZATION

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**Attachment 1 – Normal MTS Staffing Organization
Marine Transfer Station**

**CITY OF NEW YORK
DEPARTMENT OF SANITATION**

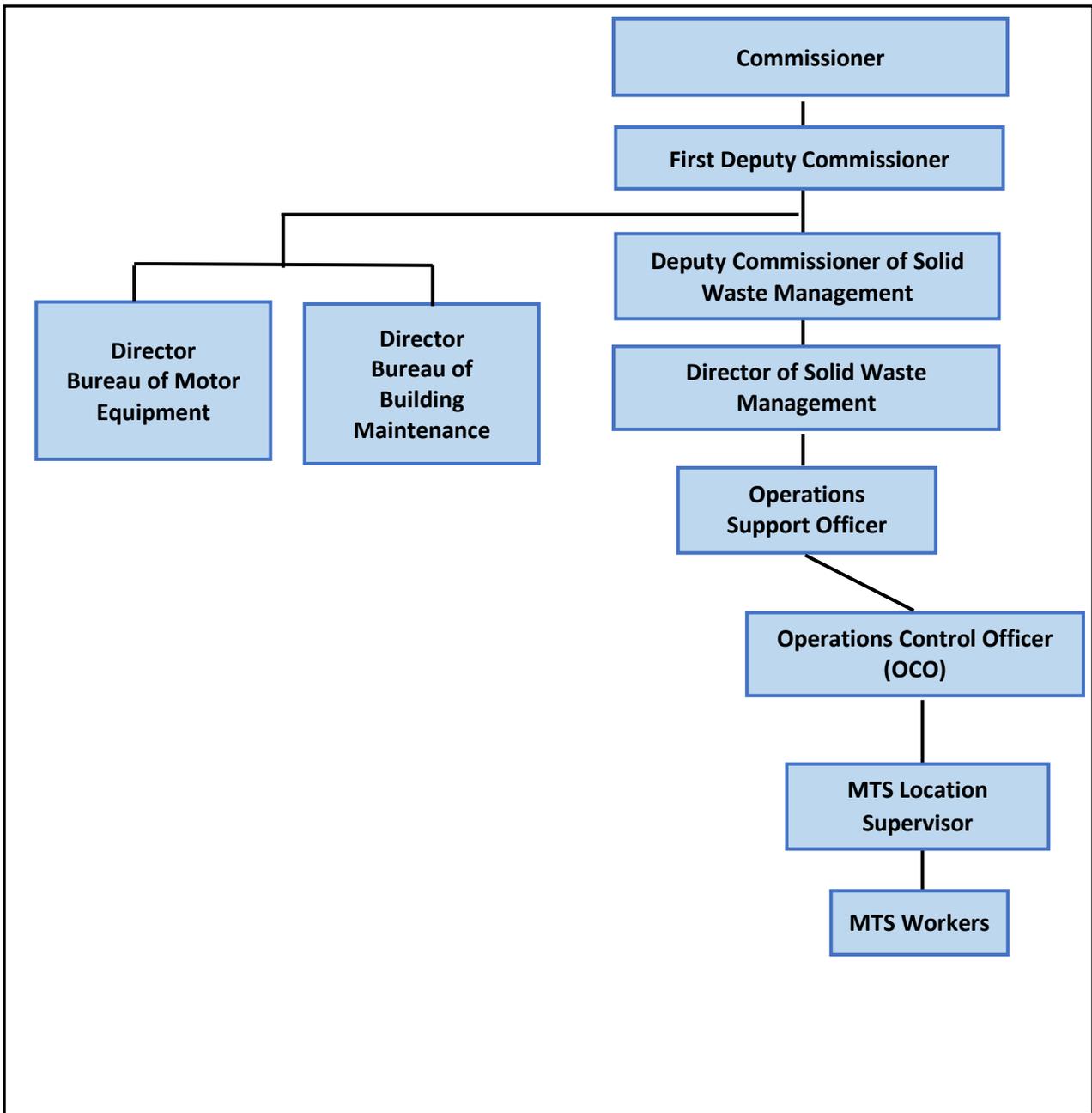


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ATTACHMENT 2

AGENCY ORGANIZATION

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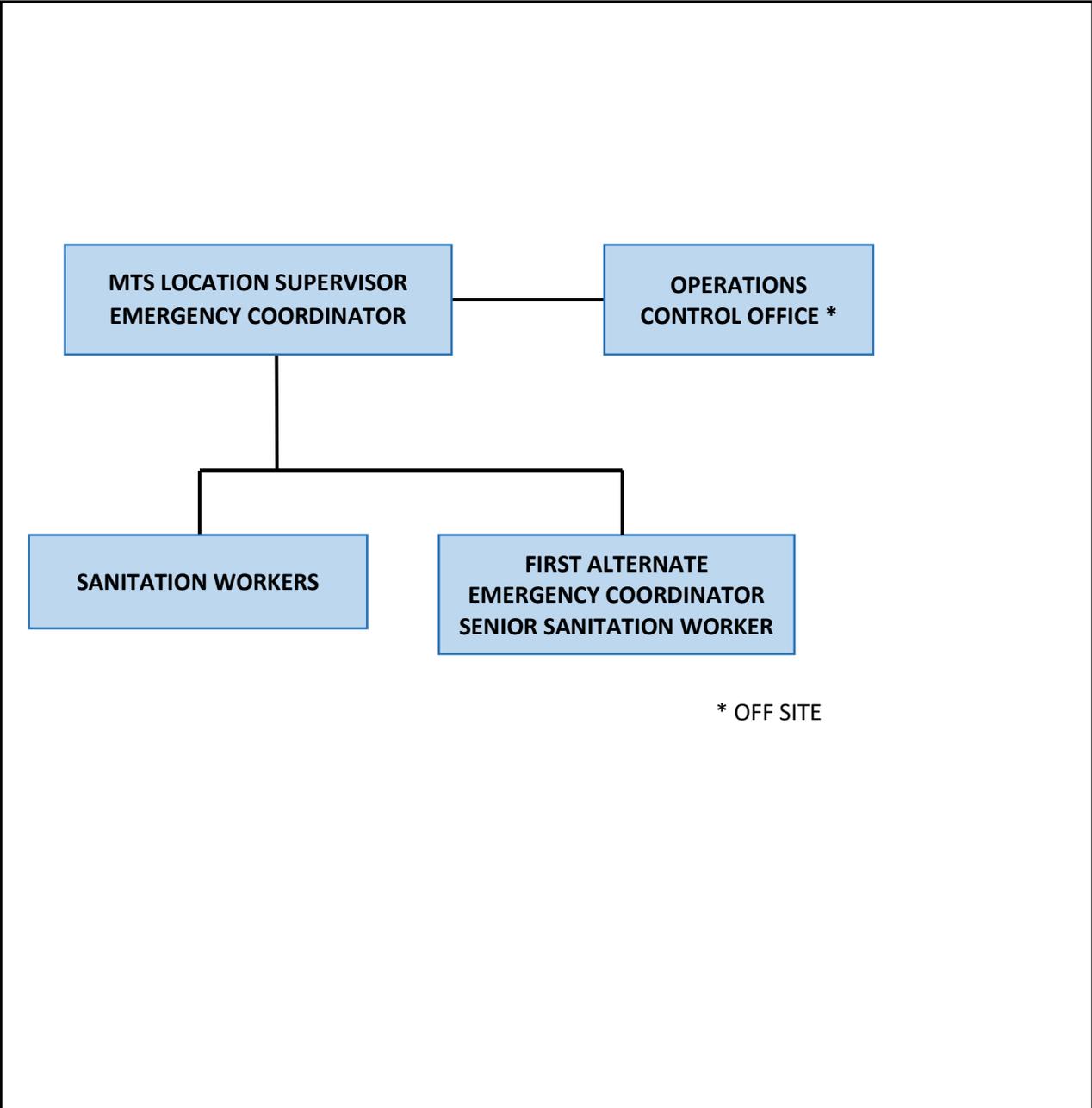


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ATTACHMENT 3

EMERGENCY RESPONSE ORGANIZATION

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**Attachment 3 – Emergency Response Organization
Marine Transfer Station**

**CITY OF NEW YORK
DEPARTMENT OF SANITATION**



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ATTACHMENT 4

COORDINATED EMERGENCY SERVICE ORGANIZATION

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LOCAL EMERGENCY RESPONSE ORGANIZATIONS

POLICE DEPARTMENT

East 91st Street MTS:

Precinct: 19th
Address: 153 East 67th Street
New York, NY 10021
Phone No: (212) 452-0600

Hamilton Avenue MTS:

Precinct: 72nd
Address: 830 4th Avenue
Brooklyn, NY 11232
Phone No: (718) 965-6311

North Shore MTS:

Precinct: 109th
Address: 37-05 Union Street
Flushing, NY 11354
Phone No: "911" or direct at (718) 319-5100

Southwest Brooklyn MTS:

Precinct: 60th
Address: 2951 West 8th Street
Brooklyn, NY 11224
Phone No: (718) 946-3311

FIRE DEPARTMENT

East 91st Street MTS:

Engine Co: 53
Address: 1836 3rd Avenue
New York, NY 10029
Phone No: (212) 570-4253
Direct line to FDNY Manhattan Dispatcher: (718) 999-2222

Hamilton Avenue MTS:

Engine Co: 279
Address: 252 Lorraine Street
Brooklyn, NY 11231
Phone No: (718) 965-8279

North Shore MTS:

Engine Co: 297
Address: 119-11 14th Road
College Point, NY 11356
Phone No: "911" or direct at (718) 476-6297

Southwest Brooklyn MTS:

Engine Co: 253
Address: 2429 86th Street and 24th Avenue
Brooklyn, NY 11204
Phone No : (718) 999-4444

EMERGENCY MEDICAL

East 91st Street MTS: "911"
Hamilton MTS: "911"
North Shore MTS: "911"
Southwest Brooklyn MTS: "911"

HOSPITAL

Southwest Brooklyn MTS:

Facility: Victory Memorial Hospital
Address: 699 92nd Street
Brooklyn, NY 11228
Phone No: (718) 368-1170

DEPARTMENT OF SANITATION

Office: Operations Control Office (OCO)
Address: 125 Worth Street
New York, NY 10013
Phone No: (646) 885-4700

STATE AND FEDERAL RESPONSE ORGANIZATIONS

NEW YORK STATE POLICE

Southwest Brooklyn MTS: (718) 946-3311

FEDERAL BUREAU OF INVESTIGATION

Phone No: (212) 384-1000

NYSDEC SPILLS HOTLINE

Phone No: (800) 457-7362 or (518) 457-7362

REGION 2 NYSDEC

Emergency Hotline: (800) 457-7362 (24 Hours)

Air: New York City Air Pollution Control Engineer
Phone No: (718) 482-4944

Water (General): Regional Water Engineer
Phone No: (718) 482-4900

Water (Spill): Regional Spills Engineer
Phone No: (718) 482-4933, Ext. 7100

Solid Waste: Regional Solid and Hazardous Materials Engineer
Phone No: (718) 482-4996

Law Enforcement: Regional Division of Law Enforcement
Phone No: (718) 482-4885

ADDITIONAL EMERGENCY RESPONSE

FEDERAL AGENCIES

National Response Center, Chemical & Oil Spills Reporting (800) 424-8802

United States Coast Guard (718) 354-4135
Atlantic Area
First District
Activities New York
212 Coast Guard Drive
Staten Island, NY 10305

Environmental Protection Agency (212) 637-3000
290 Broadway
New York, NY 10007

CITY

New York City Department of Health and Mental Hygiene (212) 676-1572/1552
Bureau of Radiological Health
2 Lafayette Street, 11th Hoot
New York, NY 10007
Weekends/afterhours call New York City Poison Control Center

New York City Poison Control Center (212) 340-4494
455 1st Avenue (212) POISONS
New York, NY 10016

Con Edison — Emergency Hot Line (800) 752-6633
Brooklyn Union Gas Company (718) 643-4050

Fire Department
Communications Office (212) 570-4300

Department of Sanitation

Operations Control Office (OCO) (646) 885-4702
(24 hrs/day, 7 days/week)

Deputy Commissioner of SWM (646) 885-4684
Bureau of Solid Waste Management (646) 885-4693
Director of Safety (718) 334-9248/19238
Deputy Commissioner, Operations (646) 885-4727/4835
Deputy Commissioner, Legal Affairs (646) 885-5006
Director of Engineering (212) 237-4520
Director; Marine Transportation (718) 984-4686
Department Inspector General (212) 825-2164/2438
Environmental Enforcement Unit (646) 885-4777

PIER OPERATIONS CONTRACTOR

WMNY

Sr. District Manager (804) 814-5586
District Manager (845) 596-2622
Environmental Protection Manager (646) 773-1814
Area Safety Manager (610) 496-9442

ATTACHMENT 5

EMERGENCY PERSONNEL LISTING

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Owner: New York City Department of Sanitation

Facility Telephone Numbers:

East 91st Street MTS: N/A

Hamilton Avenue MTS: (718) 840-5900

North Shore MTS: (718) 747-6500

Southwest Brooklyn MTS: To be provided at later date

Key Contingency Plan Personnel: MTS Supervisor or OCO

Operations Control Office*: (646) 885-4700

Environmental Enforcement Unit: (646) 885-4777

*The Operations Control Office (OCO) is available on a 24 hour/day, 7 day/week basis to handle any emergency situations that June arise at a specific MTS.

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ATTACHMENT 6

EMERGENCY EQUIPMENT LISTING

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Equipment	Equipment Location	Testing & Inspection	No. of Item Units
Water Booms	Barge Level	(1)	12
Fire Extinguishers	Throughout Facility	(1)	13
Fresh Water Fire e System	Barge Level*	(1)	1
Oil Absorbent	Storerooms	(1)	1
Materials (minimum) (Speedy-Dry)			

*The fresh water system runs off City of New York municipal water line.

Additional equipment will be provided by the FDNY, as needed

- Equipment items will be examined and refurbished at the conclusion of each emergency event. Otherwise, inspection and testing is performed at the request of a MTS Location Supervisor.

Notes:

- Descriptions of the above equipment items are not provided, as most of these items are self-explanatory.
- Certification of each equipment item will be updated as per the requirements of the manufacturer, NF PA or City Fire Code.

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ATTACHMENT 7

UNAUTHORIZED WASTE CONTRACTORS AND LABORATORIES

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THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR, NOISE & HAZARDOUS MATERIALS
DIVISION OF EMERGENCY RESPONSE & TECHNICAL ASSESSMENT

LIST OF CONTRACTORS

The following list of contractors is provided only as a helpful reference guide. The New York City Department of Environmental Protection does not endorse these contractors, nor are they the only contractors able to provide these services.

HAZARDOUS MATERIALS CONTRACTORS

Safety Clean
P.O. Box 337
Bridgeport, NJ 08014
(609) 467-3100
Fax# (609) 467-9171
Mary Ann Allen

MINORITY/WOMAN BUSINESS ENTERPRISES (M/WBE)

HAZARDOUS MATERIALS CONTRACTORS

Chemical Waste Disposal Corp.
42-24 19th Avenue
Astoria, NY 11105
(718) 274-3339
Fax# (718) 726-7917
Gary Krack
Michelle Spadavecchia

Enviro-Probe, Inc.
2917 Bruckner Blvd.
Bronx, NY 10461
(718) 863-0045
New Jersey Phone# (732) 494-4600
Fax# (718) 518-7454
Dr. Kukreja

Jeffries Environmental Consult
P.O. Box 1560
Stonybrook, NY 11790
(516) 751-2626
Fax# (516) 751-5413
Barbara Jeffries

PolyTech, Inc.
One Penn Plaza
New York, NY 10019
(212) 244-4960
Fax# (212) 967-8352
Bill Jones

MINORITY/WOMAN BUSINESS ENTERPRISES (M/WBE)

OIL SPILL CONTRACTORS
(Including Waterway Cleanup)

Chemical Waste Disposal Corp.
42-24 19th Avenue
Astoria, NY 11105
(718) 274-3339
Fax# (718) 726-7917
Gary Krack
Michelle Spadavecchia

PolyTech, Inc.
One Penn Plaza
New York, NY 10019
(212) 244-4960
Fax# (212) 967-8352
Bill Jones

The following list of contractors is provided only as a helpful reference guide. The New York City Department of Environmental Protection does not endorse these contractors, nor are they the only contractors able to provide these services.

OIL SPILL CONTRACTORS
(Including Waterway Cleanup)

Clean Harbors Cooperative
Northfield Avenue
Edison, NJ 08837
(732) 225-2300
24hr Phone# (732) 738-3002
Fax# (732) 225-5854
Ed Wiekowski

Clean Venture/Cycle Chem
82 Midland Avenue
Saddle Brook, NJ 07662
(732) 354-0210
Fax# (732) 354-9731
Pam Kopp
Ruth Osolin

OHM Corp.
Windsor Industrial Park
Building 16
Windsor, NJ 08561
(609) 443-2801
24hr Phone# (800)537-9540
Fax# (609) 588-6190
Earl Bryer

Marine Spill Response Corp.
375 Raritan Center Parkway
Edison, NJ 08837
(732) 417-0500
24hr Phone# (800) 253-2664
Fax# (732) 417-1314
Austin Smith

Fenley & Nicol Co., Inc.
445 Brook Avenue
Dear Park, NY 11729
(516) 586-4900
24hr Phone# (516) 230-0413
Fax# (516) 586-4920
Jerry Dunphy

Winston Contracting Corp.
128 20th Avenue
College Point, NY 11725
(718) 445-4232
(800) 846-8099
Fax# (718) 445-7956
Joe Sceppa
Adam Zeller

Clean Harbors of Natick
250 Lackland Drive
Middlesex, NJ 08846
(800) 782-8805
24hr Phone# (732) 248-1997
Fax# (732) 248-4414
Fred Olibari
John Stefanik

Marine Pollution Control
P.O. Box 2220
East Patchogue, NY 11772
(516) 369-4900
Fax# (516) 369-4809
Bill Fisher

A.L. Eastmond
1175 Leggett Avenue
Bronx, NY 10474
(718) 378-3000
Fax# (718) 378-4560
Mark Salamao
Douglas Williams

Tanks-A-Lot
280 East 88 Street
Brooklyn, NY 11236
(718) 387-8300
24hr Phone# (718) 272-2800
Fax# 718-272-3147
Bob Capozello

The following list of contractors is provided only as a helpful reference guide.
The New York City Department of Environmental Protection does not endorse
these contractors, nor are they the only contractors able to provide these services.

A B Oil Services
1599 Ocean Avenue
Bohemia, NY 11716
24hr Phone# (516) 567-6545
Fax: (516) 567-9390
John Bernard

AAR-BEE Oil Services, Inc.
10-11 147 Street
Whitestone, NY 11357
(718) 767-1313

Tyree Brothers
208 Route 109
Farmingdale, NY 11735
(516) 249-3150
Fax# (516) 249-3281
Otto DeBenedictus

LABORATORIES

The following list of contractors is provided only as a helpful reference guide. The New York City Department of Environmental Protection does not endorse these contractors, nor are they the only contractors able to provide these services.

Laboratory Service, Inc.
85 Lafayette St.
Carteret, N.J. 07008
Phone: 732-541-5151
Fax: 732-969-2605

American Standards Testing Bureau
40 Waters Street
New York, NY 10004
Phone: 212-943-3160
800-221-5170
Fax: 212-825-2250

Independent Testing Labs, Inc.
129-11 18th Avenue
College Point, N.Y. 11356
Phone: 718-961-8530
Fax: 718-762-1334

Case Consulting Labs, Inc.
622 Route 10
Whippany, N.J. 07981
Phone: 973-428-9666

D/L Laboratories
116 E. 16th Street
New York, N.Y. 10003-2112
Phone: 212-777-4445
Fax: 212-505-8419

Konstandt Labs, Inc.
27-14 39th Avenue
Long Island City, N.Y. 11101
Phone: 718-784-8570
Fax: 718-937-8172

National Testing Laboratories, Inc.
27-14 39th Avenue
Long Island City, N.Y. 11101
Phone: 718-784-2626
Fax: 718-937-8172

Schwartz Chemical Co., Inc.
50-01 Second Street
Long Island City, N.Y. 11101
Phone: 718-784-7592

ETL
208 Route 109
NY
Phone: 516-249-1456
Fax: 516-249-8344

Environmental Testing Labs
284 Raritan Parkway CN3154
Edison, N.J. 08818
Phone: 201-225-6707

Pednault Associates
1615 8th Avenue
Bohemia, NY 11716
Phone: 516-467-8477
Fax: 516-587-5579

South Mall Labs
26 North Mall
Plainview, N.Y. 11803
Phone: 516-293-2191
Fax: 516-293-3152

ATTACHMENT 8

CITY OF NEW YORK RADIOACTIVE MATERIALS LICENSE

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**CITY OF NEW YORK
RADIOACTIVE MATERIALS LICENSE**

Pursuant to the New York City Charter and Article 175 of the New York City Health Code and in reliance on statements and representations heretofore made by licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations and orders now or hereafter in effect of all appropriate regulatory agencies and to any conditions specified below.

In accordance with application dated 16 April 2015 from Josh Frank, R.S.O., Environmental Police Unit, New York City Department of Sanitation; License number 52-3114-01 is hereby amended in its entirety, and to read:

LICENSEE

3a. License Number: 52-3114-01

1. Name: New York City Department of Sanitation
Environmental Police Unit **3b. Amendment Number:** 7

2. Address: 465 Hamilton Avenue
Brooklyn, New York 11232 **4. Expiration Date:** 30 November 2019

5. Reference Number:

6. Radioactive materials (element number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
(A) Iodine-131	(A) Any, as radioactive contaminant in ordinary municipal waste	(A) In activities that do not exceed 100 times ambient background level
(B) Technetium-99m	(B) Any, as radioactive contaminant in ordinary municipal waste	(B) In activities that do not exceed 100 times ambient background level
(C) Thallium-201	(C) As radioactive contaminant in ordinary municipal waste	(C) In activities that do not exceed 100 times ambient background level
(D) Phosphorus-32	(D) Any, as radioactive contaminant in ordinary municipal waste	(D) In activities that do not exceed 100 times ambient background level
(E) Iodine-125	(E) Any, as radioactive contaminant in ordinary municipal waste	(E) In activities that do not exceed 100 times ambient background level
(F) Iodine-123	(F) Any, as radioactive contaminant in ordinary municipal waste	(F) In activities that do not exceed 100 times ambient background level
(G) Gallium-67	(G) As radioactive contaminant in ordinary municipal waste	(G) In activities that do not exceed 100 times ambient background level
(H) Indium-111	(H) As radioactive contaminant in ordinary municipal waste *****	(H) In activities that do not exceed 100 times ambient background level

**CITY OF NEW YORK
RADIOACTIVE MATERIALS
LICENSE**

License Number: 52-3114-01

Amendment Number: 7

Reference Number:

CONDITIONS

9. Authorized Use:

(A) through (H) for storage to decay only.

10. The radioactive material may only be stored at the following locations in New York City: 3 Farragut Street, South Bronx Marine Transfer Station, Bronx, NY 10474; Southwest Marine Transfer Station, 25th Avenue and Bay 41st Street, Brooklyn, NY 11214; South Avenue off West Shore Expressway (Salt Dome), Staten Island, NY 10314.

11. The licensee shall comply with the provisions of Article 175 of the New York City Health Code entitled "Radiation Control".

12. The radiation safety officer for this license is Josh Frank.

13. Radioactive material as a sealed source shall not be opened by the licensee.

14. The licensee shall contact the Office of Radiological Health immediately if any of the quantities listed in Subitem (8) are exceeded, if materials other than those listed in Subitem (6) are discovered, or if any detected material is unidentifiable.

15. Written records of stored radioactive material shall be maintained and shall include identity of the material, its activity at time and date of storage, and the activity on the date of release as ordinary waste.

16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations and procedures contained in the documents including any enclosures listed below. Article 175 of the New York City Health Code shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- (A) Application dated 16 April 2015
- (B) Email with attachments dated 22 April 2015

**FOR THE NEW YORK CITY DEPARTMENT
OF HEALTH AND MENTAL HYGIENE**

Date: 5/26/15



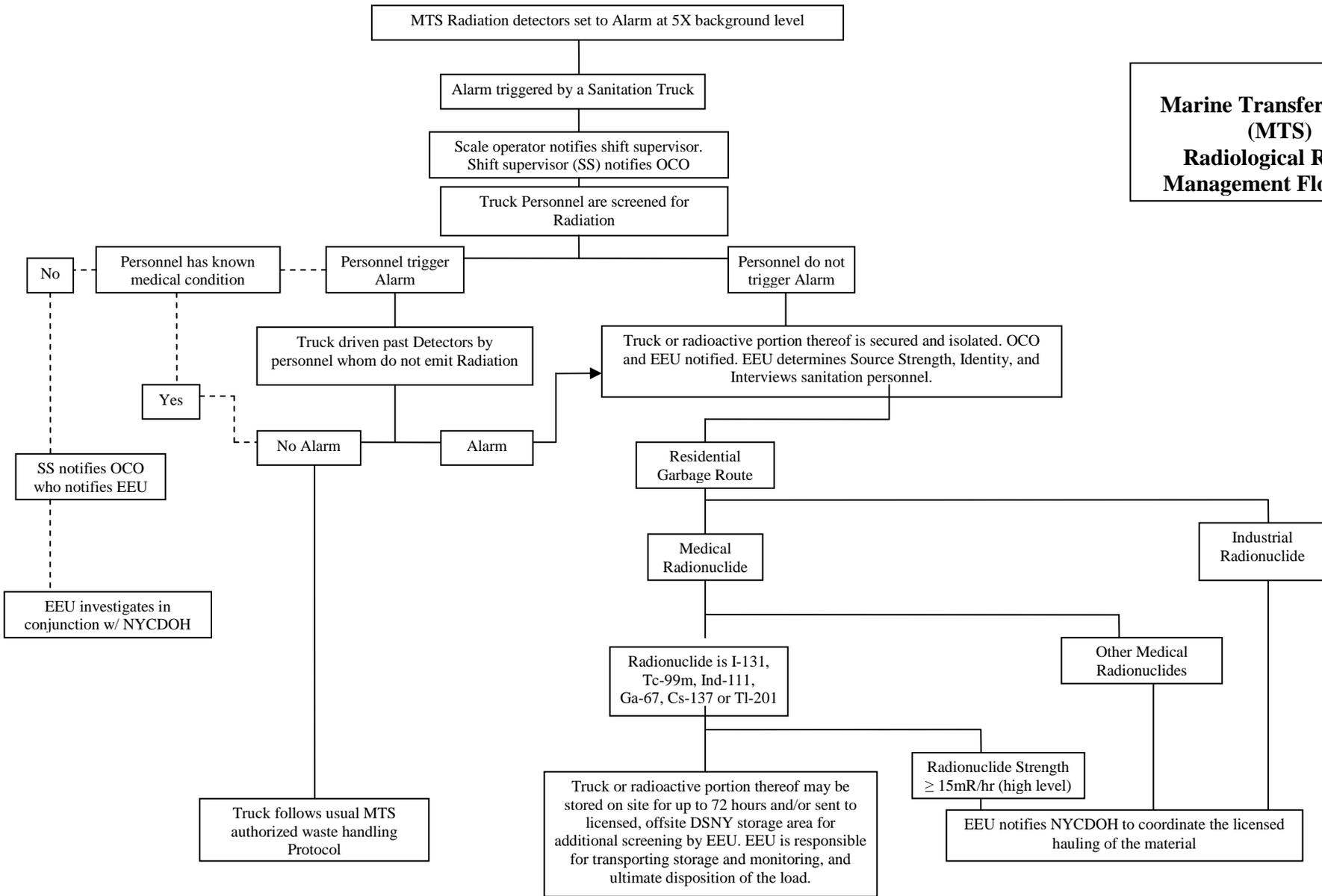
**Erik Finkelstein
Radioactive Materials Division
Office of Radiological Health**

ATTACHMENT 9

MTS RADIOLOGICAL REFUSE MANAGEMENT FLOWCHART

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**Marine Transfer Station
(MTS)
Radiological Refuse
Management Flowchart**



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ATTACHMENT 10

DSNY ENVIRONMENTAL ENFORCEMENT UNIT RADIATION POLICY AND PROCEDURE MANUAL

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RADIATION
POLICY AND
PROCEDURE
MANUAL

New York City Department of Sanitation
Environmental Police Unit
465 Hamilton Ave
Brooklyn, NY 11232

RADIATION POLICY AND PROCEDURE MANUAL

Revised by:
Josh Frank
Radiation Safety Officer

Developed by:
EdBrescia
Radiation Safety Officer

RADIATION SAFETY PROCEDURE MANUAL

Introduction

The New York City Department of Sanitation's Environmental Police Unit possesses a limited scope license issued by the New York City Department of Health and Mental Hygiene (DOHMH) to segregate, transport, and store limited quantities of medical isotopes that are uncovered at private transfer stations throughout New York City. This waste is classified as class A stable low-level radioactive waste (LLRW). The department currently manages three sites that are licensed for storage.

Medical isotopes listed in license are as follows:

<u>Isotope</u>	<u>half-life</u>
Iodine 123	13hours
Iodine125	60 days
Iodine131	8.1 days
Gallium 67	3.3 days
Technetium 99m	6 hours
Phosphorus 32	14 days
Indium 111	2.8 days
Thallium 201	3.3 days

The detection of isotopes other than those listed above are not permitted for storage at the licensed sites. DOHMH shall be notified immediately if isotopes other than those mentioned above are detected. DOHMH is informed and provide additional assistance whenever unlicensed radioactive material is identified.

RADIATION AND RADIOACTIVE DECAY

Radioactive materials have certain characteristics, such as the types of radiations emitted and the rate of emission. Knowledge of these characteristics is helpful in establishing protective controls for the use of the material.

RADIOACTIVITY

A nuclide is an atom with a particular number of protons and neutrons in its nucleus. A radionuclide is a nuclide that has the property of spontaneously converting part of its mass into energy and emitting this energy in the form of energetic particles and electromagnetic radiation. The radionuclide emits radiation. This property is called radioactivity and the actual event is referred to as radioactive decay, disintegration, or transformation

HALF-LIFE

The process of radioactive decay is spontaneous and the time when any particular atom will decay is not known. However, when large numbers of radioactive atoms are present, the fraction of atoms that will decay in a given time span (the decay rate) can be specified. A quantity that uniquely identifies the rate of decay is the half-life of the radionuclide. This is the time required for one-half of the atoms present to decay. The half-life is a useful measure because no two radionuclides have exactly the same half-life. Also, the half-life is unaffected by the chemical or physical environment of the atom.

FORMS OF IONIZING RADIATION

The manner in which a radionuclide will emit radiation is well defined and quite characteristic. The term "manner" refers to the type, energy and intensity of the radiation.

Alpha particles - massive charged particles, identical in mass and charge with He nuclei, that are 4 emitted from the nucleus with discrete energies (for example, U-238 emits alpha particles)

Beta particles - light charged particles that come in positive (positron) and negative (negatron) forms, have the same mass as an electron, and are emitted from the nucleus with a continuous range of energies up to some maximum energy

Gamma rays - electromagnetic radiation emitted from the nucleus with discrete energies (for example, I-131, I-125, Co-57, Cr-51, and Cs-137)

X-Rays - electromagnetic radiation emitted from the electron shells of an atom with discrete energies (for example, I-131, and I-125)

ALARA (as low as reasonably achievable)

To maintain radiation exposures and releases of radioactive material as far below the limits as is reasonably achievable. The supervisors of the Environmental Police Unit are committed to the program described herein for keeping individual and collective doses as low as is reasonably achievable (ALARA) in keeping with this commitment, the Industrial Hygienist will address radiation safety by developing the necessary written policy and procedures to foster the ALARA concept within the unit.

The organization will include a Radiation Safety Officer responsible for implementation of the written plan.

A formal annual review of the radiation safety program, including ALARA considerations, will be conducted. This will include reviews of operating procedures and past dose records, inspections, and consultations with the New York City Department of Health and Mental Hygiene.

Modifications to operating and maintenance procedures, equipment, and facilities will be made if they will reduce exposure. The program will be able to demonstrate that improvements have been sought and modifications have been considered and implemented when reasonable, if modifications have been recommended but not implemented, justification for non-implementation will be available.

In addition to maintaining exposure to individuals, as far below the limits as is reasonably achievable, the sum of doses received by all exposed individuals will also be maintained at the lowest practical level.

Limited Scope License

This license is issued to the agencies that handle radioactive waste in small quantities. Such a license specifies the isotopes and the primary persons who come into contact with the material.

Radiation Safety Officer

The Radiation Safety Officer (RSO) for this license will be the Industrial Hygienist for the unit. The RSO is the designated person responsible for the coordination of the radiation protection program

Scope of the Program

General surveillance over all activities involving radioactive waste/material. Determining compliance with applicable rules and regulations and license conditions. Distributing personal monitoring equipment. Maintaining recordkeeping of film badge reports for possible exposure. Conducting training programs on proper safety procedures. Supervising and coordinating the radioactive waste disposal program. Storing all radioactive waste materials.

Training Program

Every Environmental Police Officer will be trained on the concept of ALARA and in addition will be trained on radiation measurements, hazards, usage of radiation meters, and compliance and regulatory issues. EPO's also receive EPA certified 40-hour hazardous materials training that includes radiation safety at the EPA Response Training Center and /or NYPD Emergency Service Unit (ESU) training ground. The RSO will schedule educational sessions to instruct workers on exposure reduction procedures and radiation exposure principles. The RSO will ensure that all Officers who may be exposed to radiation will be instructed in the ALARA philosophy.

All EPO's will complete:

ISP Courses

IS-3 Radiological Emergency Management 10 hours

IS-5a Intro to Hazardous Materials 10 hours

IS-301 Radiological Emergency Response 10 hours

Center for Radiological/Nuclear Training (CTOS)

AWR-140 W WMD Rad/Nuc Awareness Course 6 hours

National Incident Management System (NIMS)

NIMS Courses

IS-100 LEB 3 hours

IS-200b 3 hours

IS-700a 3 hours

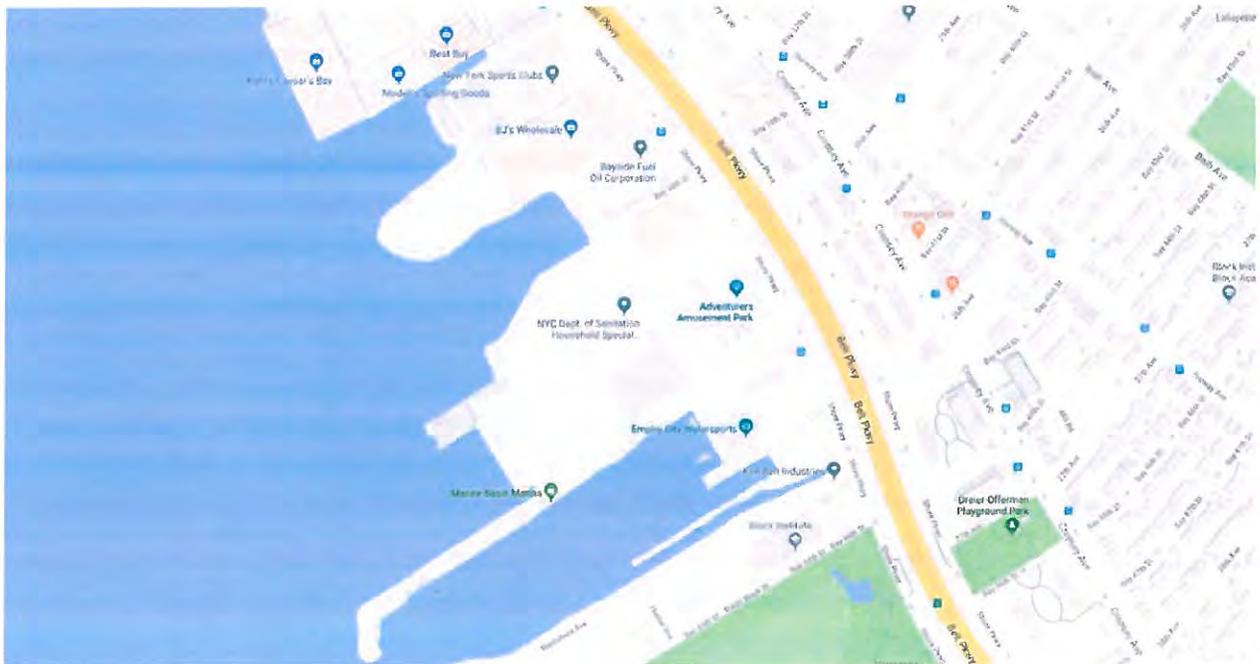
IS-800b 3 hours

And additional EPO's will receive on the Job Radiation Training for 40 hours

Storage Facilities

The Department has three licensed storage sites for low level radioactive waste permitted by the New York City Department of Health and Mental Hygiene located at the **SouthWest Marine Transfer Station**, 25th avenue and Bay 41st Street, **Brooklyn**, **South Bronx Marine Transfer Station**, 3 Farragut Street Bronx NY and **Staten Island Salt Dome**, South Ave. off West Shore Expressway, SI. All facilities are locked at all times. There is signage at each of the sites that read "Radioactive Storage Area". In addition there are a multiple of 55-gallon drums, in secure fenced off areas, which are labeled at each of the sites that the LLRW is placed into to await decay.

SouthWest MTS, Brooklyn:



Instruments & Instrument Calibration

The unit currently utilizes the Ludlum Model 702i and Thermo Identifinder2 for the identification radioisotopes and the Ludlum 3019 handheld survey meter for the measurement of gamma radiation. All units are calibrated by NYPD Counter Terrorism Unit, headed by Dr. Karem. All meters are calibrated on a yearly basis. Records are kept of all calibrations performed on all meters. The unit also uses a CS-137 check source as a secondary standard throughout the year.

Personal Monitoring Program

All Environmental Police Officers are under a medical monitoring program that is coordinated by the Industrial Hygienist. All EPO's are issued film badges that have a passive diffusion mechanism to monitor for exceedances of OSHA permissible exposure limits. Reports are issued by **Mirion Technologies Dosimetry Services** on a quarterly basis. The results are kept in a binder and are available to all EPO's at any time. EPO's shall be notified immediately if doses are noticeably above background levels. At that time they will be removed from coming into contact with any LLRW until further investigation is completed.

Rules for the Safe Segregation, Transport, and Storage of LLRW

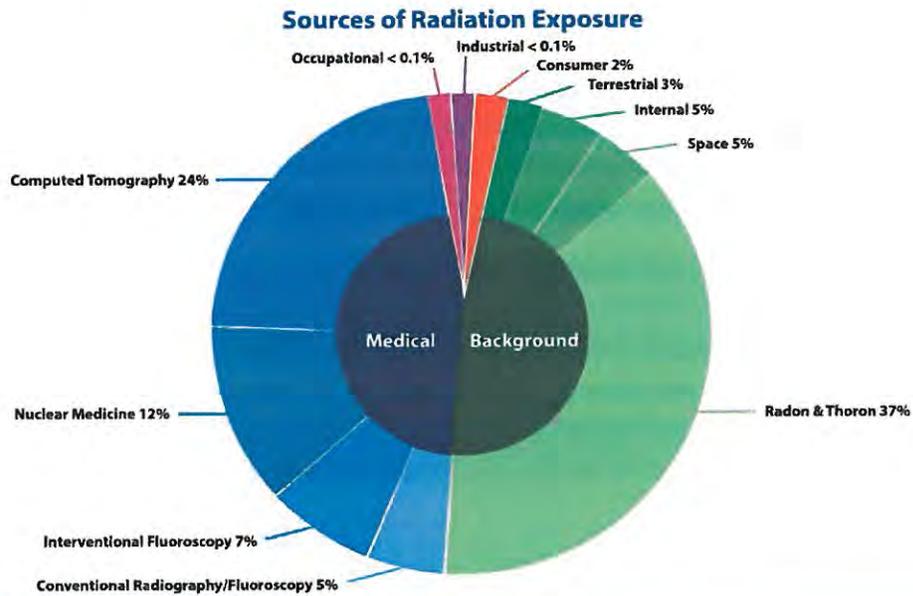
- Don correct PPE- Full/half face respirator, Tyvek suit, rubber booties, film badge, and disposable gloves
- Use Ludlum model 702i to identify isotope
- Use Ludlum model 3019 survey meter to scan for radioactive waste
- Record isotope and measurement in microrems/hour
- Search for documentation
- Survey area for spill containment
- Double-bag found source
- Transport to storage facility and place into 55 gallon drum and/or dumpster

Waste Disposal

Once isotope has decayed to background levels the material shall be placed into any department collection truck for proper solid waste disposal. If material is other than medical isotope is uncovered the DOHMH will be notified immediately.

Annual Review of the Radiation Safety Program & Occupational Exposures:

The RSO will perform an annual review of the radiation safety program for adherence to ALARA concepts. Review of specific methodology in use may be conducted on a more frequent basis. The RSO will review, at least quarterly, the external radiation doses of EPO's to determine whether their doses are ALARA in accordance with the radiation safety program.



Sources	Radon & Thoron	Computed Tomography	Nuclear Medicine	Interventional Fluoroscopy	Space	Conventional Radiography/Fluoroscopy	Internal	Terrestrial	Consumer	Occupational	Industrial
Units											
mrem (United States)	228 mrem	147 mrem	77 mrem	43 mrem	33 mrem	33 mrem	29 mrem	21 mrem	13 mrem	0.5 mrem	0.3 mrem
mSv (International)	2.28 mSv	1.47 mSv	0.77 mSv	0.43 mSv	0.33 mSv	0.33 mSv	0.29 mSv	0.21 mSv	0.13 mSv	0.005 mSv	0.003 mSv

(Source: National Council on Radiation Protection & Measurements, Report No. 160)



NRC Occupational Dose Limits

Whole Body (TEDE)	5,000 mrem/yr
Any Organ (TODE)	50,000 mrem/yr
Skin (SDE)	50,000 mrem/yr
Extremity (SDE)	50,000 mrem/yr
Lens of Eye (LDE)	15,000 mrem/yr
Embryo/Fetus of DPW	500 mrem/yr
Member of the Public	100 mrem/yr

Note: 1,000 mrem = 1 rem

Briefing for Media

List of Nuclear Medicine Radioisotopes

Ac-225	10.0d	Monoclonal antibody attachment used for cancer treatment (RIT), also parent of Bi-213.
Ac-227	21.8y	Parent of Ra-223 (Monoclonal antibody attachment used for cancer treatment (RIT)).
Am-241	432y	Osteoporosis detection, heart imaging.
As-72	26.0h	Planar imaging, SPECT or PET.
As-74	17.8d	Positron-emitting isotope with biomedical applications.
At-211	7.21h	Monoclonal antibody attachment (alpha emitter) used for cancer treatment (RIT), used with F-18 for in vivo studies.
Au-198	2.69d	Cancer treatment using mini-gun (B), treating ovarian, prostate, and brain cancer.
B-11	Stable	Melanoma and brain tumor treatment.
Be-7	53.2d	Used in berylliosis studies.
Bi-212	1.10h	Monoclonal antibody attachment (alpha emitter) used for cancer treatment (RIT), cellular dosimetry studies.
Bi-213	45.6m	Monoclonal antibody attachment (alpha emitter) used for cancer treatment (RIT).

Br-75	98m	Planar imaging, SPECT or PET (C).
Br-77	57h	Label radiosensitizers for Te quantization of hypoxia in tumors, and monoclonal antibody labeling.
C-11	20.3m	Radiotracer in PET scans to study normal/abnormal brain functions.
C-14	5730y	Radiolabeling for detection of tumors (breast, et al.).
Ca-48	Stable	
Cd-109	462d	Cancer detection (C), pediatric imaging (C).
Ce-139	138d	Calibrates high-purity germanium gamma detectors.
Ce-141	32.5d	Gastrointestinal tract diagnosis, measuring regional myocardial blood flow.
Cf-252	2.64y	Cervical, melanoma, brain cancer treatment.
Co-55	17.5h	Planar imaging, SPECT or PET (B). Used in PET imaging of damaged brain tissue after stroke.
Co-57	272d	Gamma camera calibration, should be given high priority, radiotracer in research and a source for X-ray fluorescence spectroscopy.
Co-60	5.27y	Teletherapy (destroy cancer cells), disinfect surgical equipment and medicines, external radiation cancer therapy (E).
Cr-51	27.7d	Medical, cell labeling and dosimetry.
Cs-130	29.2m	Myocardial localizing agent.
Cs-131	9.69d	Intracavity implants for radiotherapy.
Cs-137	30.2y	Blood irradiators, PET imaging, tumor treatment.
Cu-61	3.35h	Planar imaging, SPECT or PET (B).
Cu-62	4.7m	Positron emitting radionuclide (B), cerebral and myocardial blood flow used As-a tracer in conjunction with Cu 64 (B).
Cu-64	12.7h	PET scanning (C), planar imaging (C), SPECT imaging (C) dosimetry studies (C), cerebral and myocardial blood flow (C), used with Cu-62 (C), treating of colorectal cancer.
Cu-67	61.9h	Cancer treatment/diagnostics, monoclonal antibodies, radioimmunotherapy, planar imaging, SPECT or PET.
Dy-165	2.33h	Radiation synovectomy, rheumatoid arthritis treatment.
Eu-152	13.4y	Medical.
Eu-155	4.73y	Osteoporosis detection.
F-18	110m	Radiotracer for brain studies (C), PET imaging (C).
Fe-55	2.73y	Heat source.
Fe-59	44.5d	Medical.
Ga-64	2.63m	Treatment of pulmonary diseases ending in fibrosis of lungs.
Ga-67	78.3h	Imaging of abdominal infections (C), detect Hodgkins/non-Hodgkins lymphoma (C), used

		with In-111 for soft tissue infections and osteomyelitis detection (C), evaluate sarcoidosis and other granulomatous diseases, particularly in lungs and mediastinum (C).
Ga-68	68.1m	Study thrombosis and atherosclerosis, PET imaging, detection of pancreatic cancer, attenuation correction.
Gd-153	242d	Dual photon source, osteoporosis detection, SPECT imaging.
Ge-68	271d	PET imaging.
H-3	12.3y	Labeling, PET imaging.
I-122	3.6m	Brain blood flow studies.
I-123	13.1h	Brain, thyroid, kidney, and myocardial imaging (C), cerebral blood flow (ideal for imaging) (C), neurological disease (Alzheimer's) (C).
I-124	4.17d	Radiotracer used to create images of human thyroid, PET imaging.
I-125	59.9d	Osteoporosis detection, diagnostic imaging, tracer for drugs, monoclonal antibodies, brain cancer treatment (I-131 replacement), SPECT imaging, radiolabeling, tumor imaging, mapping of receptors in the brain (A), interstitial radiation therapy (brachytherapy) for treatment of prostate cancer (E).
I-131	8.04d	Lymphoid tissue tumor/hyperthyroidism treatment (C), antibody labeling (C), brain biochemistry in mental illness (C), kidney agent (C), thyroid problems (C), alternative to Tl-201 for radioimmunotherapy (C), imaging, cellular dosimetry, scintigraphy, treatment of graves disease, treatment of goiters, SPECT imaging, treatment of prostate cancer, treatment of hepatocellular carcinoma, treatment of melanoma (A), locate osteomyelitis infections (A), radiolabeling (A), localize tumors for removal (A), treatment of spinal tumor (A), locate metastatic lesions (A), treat neuroblastoma (A), internal (systemic) radiation therapy (E), treatment of carcinoma of the thyroid (E).
I-132	2.28h	Mapping precise area of brain tumor before operating.
In-111	2.81d	Detection of heart transplant rejection (C), imaging of abdominal infections (C), antibody labeling (C) cellular immunology (C), used with Ga-67 for soft tissue infection detection and osteomyelitis detection (C), concentrates in liver, kidneys (C), high specific activity (C), white blood cell imaging, cellular dosimetry, myocardial scans, treatment of leukemia, imaging tumors.
In-115m	4.49h	Label blood elements for evaluating inflammatory bowel disease.
Ir-191m	6s	Cardiovascular angiography.
Ir-192	73.8d	Implants or "seeds" for treatment of cancers of the prostate, brain, breast, gynecological cancers.
Kr-81m	13.3s	Lung imaging.
Lu-177	6.68d	Heart disease treatment (restenosis therapy), cancer therapy.
Mn-51	46.2m	Myocardial localizing agent.
Mn-52	5.59d	PET scanning.
Mo-99	65.9h	Parent for Tc-99m generator used for brain, liver, lungs, heart imaging.
N-13	9.97m	PET imaging, myocardial perfusion.
Nb-95	35d	Study effects of radioactivity on pregnant women and fetus, myocardial tracer, PET imaging.

O-15	122s	Water used for tomographic measuring of cerebral blood flow (C), PET imaging (C), SPECT imaging.
Os-191	15.4d	Parent for Ir-191m generator used for cardiovascular angiography.
Os-194	6.00y	Monoclonal antibody attachment used for cancer treatment (RIT).
P-32	14.3d	Polycythaemia Rubra Vera (blood cell disease) and leukemia treatment, bone disease diagnosis/treatment, SPECT imaging of tumors (A), pancreatic cancer treatment (A), radiolabeling (A).
P-33	25d	Labeling.
Pb-203	2.16d	Planar imaging, SPECT or PET (used with Bi-212) (B), monoclonal antibody immunotherapy (B), cellular dosimetry.
Pb212	10.6h	Radioactive label for therapy using antibodies, cellular dosimetry.
Pd-103	17d	Prostate cancer treatment.
Pd-109	13.4h	Potential radiotherapeutic agent.
Pu-238	2.3y	Pacemaker (no Pu-236 contaminants).
Ra-223	11.4d	Monoclonal antibody attachment (alpha emitter) used for cancer treatment (RIT).
Ra-226	1.60e3y	Target isotope to make Ac-227, Th-228, Th-229 (Parents of alpha emitters used for RIT).
Rb-82	1.27m	Myocardial imaging agent, early detection of coronary artery disease, PET imaging, blood flow tracers.
Re-186	3.9d	Cancer treatment/diagnostics, monoclonal antibodies, bone cancer pain relief, treatment of rheumatoid arthritis, treatment of prostate cancer, treating bone pain.
Re-188	17h	Monoclonal antibodies, cancer treatment.
Rh-105	35.4h	Potential therapeutic applications: target neoplastic cells (e.g., small cell lung cancer) (A), labeling of molecules and monoclonal antibodies (A).
Ru-97	2.89d	Monoclonal antibodies label (C), planar imaging (C), SPECT or PET techniques (C), gamma-camera imaging.
Ru-103	39d	Myocardial blood flow, radiolabeling microspheres, PET imaging.
S-35	87.2d	Nucleic acid labeling, P-32 replacement, cellular dosimetry.
Sc-46	84d	Regional blood flow studies, PET imaging.
Sc-47	3.34d	Cancer treatment/diagnostics (F), monoclonal antibodies (F), radioimmunotherapy (F).
Se-72	8.4d	Brain imaging, generator system with As-72, monoclonal antibody immunotherapy.
Se-75	120d	Radiotracer used in brain studies, scintigraphy scanning.
Si-28	Stable	Radiation therapy of cancer.
Sm-145	340d	Brain cancer treatment using I-127 (D).
Sm-153	2.00d	Cancer treatment/diagnostics (C), monoclonal antibodies (C), bone cancer pain relief (C), higher uptake in diseased bone than Re-186 (C), treatment of leukemia.
Sn-117m	13.6d	Bone cancer pain relief.

Sr-85	65.0d	Detection of focal bone lesions, brain scans.
Sr-89	50d	Bone cancer pain palliation (improves the quality of life), cellular dosimetry, treatment of prostate cancer, treatment of multiple myeloma, osteoblastic therapy, potential agent for treatment of bone metastases from prostate and breast cancer (E).
Sr-90	29.1y	Generator system with Y-90 (B), monoclonal antibody immunotherapy (B).
Ta-178	9.3m	Radionuclide injected into patients to allow viewing of heart and blood vessels.
Ta-179	1.8y	X-ray fluorescence source and in thickness gauging (might be a good substitute for Am-241).
Ta-182	115d	Bladder cancer treatment, internal implants.
Tb-149	4.13h	Monoclonal antibody attachment used for cancer treatment (RIT).
Tc-96	4.3d	Animal studies with Tc-99m.
Tc-99m	6.01h	Brain, heart, liver (gastroenterology), lungs, bones, thyroid, and kidney imaging (C), regional cerebral blood flow (C), equine nuclear imaging (C), antibodies (C), red blood cells (C), replacement for Tl-201 (C).
Th-228	720d	Cancer treatment, monoclonal antibodies, parent of Bi-212.
Th-229	7300y	Grandparent for alpha emitter (Bi-213) used for cancer treatment (RIT), parent of Ac-225.
Tl-201	73.1h	Clinical cardiology (C), heart imaging (C), less desirable nuclear characteristics than Tc-99m for planar and SPECT imaging (C), myocardial perfusion, cellular dosimetry.
Tm-170	129d	Portable blood irradiations for leukemia, lymphoma treatment, power source.
Tm-171	1.9y	Medical.
W-188	69.4d	Cancer treatment, monoclonal antibodies, parent for Re-188 generator.
Xe-127	36.4d	Neuroimaging for brain disorders, research for variety of neuropsychiatric disorders, especially schizophrenia and dementia, higher resolution SPECT studies with lower patient dose, lung imaging (some experts believe it is superior to Xe-133 in inhalation lung studies).
Xe-133	5.25d	Lung imaging (C), regional cerebral blood flow (C), liver imaging (gas inhalation) (C), SPECT imaging of brain, lung scanning, lesion detection.
Y-88	107d	Substituted for Y-90 in development of cancer tumor therapy.
Y-90	64h	Internal radiation therapy of liver cancer (C), monoclonal antibodies (C), Hodgkins disease, and hepatoma (C), cellular dosimetry, treating rheumatoid arthritis, treating breast cancer, treatment of gastrointestinal adenocarcinomas (A).
Y-91	58.5d	Cancer treatment (RIT), cellular dosimetry.
Yb-169	32d	Gastrointestinal tract diagnosis.
Zn-62	9.22h	Parent of Cu-62, a positron-emitter, used for the study of cerebral and myocardial blood flow.
Zn-65	244d	Medical.
Zr-95	64.0d	Medical.

List of Other Nuclear Radioisotopes

Isotope	Half-life (yr)	Rel. Abundance
Holmium-166m	1,200	none
Berkelium-247	1,380	none
Radium-226	1,600	trace
Molybdenum-93	4,000	none
Holmium-153	4,570	none
Curium-246	4,730	none
Carbon-14	5,730	trace
Plutonium-240	6,563	none
Thorium-229	7,340	none
Americium-243	7,370	none
Curium-245	8,500	none
Curium-250	9,000	none
Tin-126	10,000	none
Iodine-129	15,700	none
Niobium-94	20,300	none
Plutonium-239	24,110	none
Proactinium-231	32,760	trace
Lead-202	52,500	none
Lanthanium-137	60,000	none
Thorium-230	75,380	none
Nickel-59	76,000	none
Thorium-230	77,000	trace
Calcium-41	103,000	none
Neptunium-236	154,000	none
Uranium-233	159,200	none
Rhenium-186m	200,000	none
Technetium-99	211,000	none
Krypton-81	229,000	none

Uranium-234	245,500	trace
Chlorine-36	301,000	none
Curium-248	340,000	none
Bismuth-208	368,000	none
Plutonium-242	373,300	none
Aluminum-26	717,000	none
Selenium-79	1,130,000	none
Iron-60	1,500,000	none
Beryllium-10	1,510,000	none
Zircon-93	1,530,000	none
Curium-247	1,560,000	none
Gadolinium-150	1,790,000	none
Neptunium-237	2,144,000	none
Cesium-135	2,300,000	none
Technetium-96	2,600,000	none
Dysprosium-154	3,000,000	none
Bismuth-310m	3,040,000	none
Mietnerium-53	3,740,000	none
Technetium-98	4,200,000	none
Palladium-107	6,500,000	none
Hafnium-182	9,000,000	none
Lead-205	15,300,000	none
Curium-247	15,600,000	none
Uranium-236	23,420,000	none
Niobium-92	34,700,000	none
Plutonium-244	80,800,000	none
Samarium-146	103,000,000	none
Uranium-236	234,200,000	none
Uranium-235	703,800,000	rare
Potassium-40	1,280,000,000	rare
Uranium-238	4,468,000,000	common
Rubidium-87	4,750,000,000	common
Thorium-232	14,100,000,000	common
Lutetium-176	37,800,000,000	rare
Rhenium-187	43,500,000,000	common

Lanthanium-138	105,000,000,000	rare
Samarium-147	106,000,000,000	common
Platinum-190	650,000,000,000	rare
Tellurium-123	$>1 \times 10^{13}$	rare
Osmium-184	$>5.6 \times 10^{13}$	rare
Gadolinium-152	1.08×10^{14}	rare
Tantalum-180m	$>1.2 \times 10^{15}$	rare
Xenon-124	$>1.6 \times 10^{14}$	rare
Indium-115	4.41×10^{14}	common
Zinc-70	$>5 \times 10^{14}$	rare
Hafnium-174	2.0×10^{15}	rare
Osmium-186	2.0×10^{15}	common
Samarium-149	$>2 \times 10^{15}$	common
Neodymium-144	2.29×10^{15}	common
Samarium-148	7×10^{15}	common
Cadmium-113	7.7×10^{15}	common
Cerium-142	$>5 \times 10^{16}$	common
Tungsten-183	$>1.1 \times 10^{17}$	common
Vanadium-50	1.4×10^{17}	rare
Lead-204	1.4×10^{17}	common
Chromium-50	$>1.8 \times 10^{17}$	common
Tungsten-184	$>3 \times 10^{17}$	common
Calcium-48	$>6.3 \times 10^{18}$	common
Molybdenum-100	1.0×10^{19}	common
Neodymium-150	$>1.1 \times 10^{19}$	common
Zircon-96	$>3.8 \times 10^{19}$	common
Selenium-82	1.1×10^{20}	common
Tellurium-130	7.9×10^{20}	common
Xenon-136	$>2.4 \times 10^{21}$	common
Tellurium-128	2.2×10^{24}	common
Stable Isotopes	infinite	**

Company used for radioactive disposal

Radiac Research
Research institute in Brooklyn, New York

John Tekin

261 Kent Avenue, Brooklyn, NY 11249
Phone : (718)-963-2233

Email : jtekin@radiacenv.com

Occupational Safety and Health Administration

- **Part Number:** 1910
 - **Part Title:** Occupational Safety and Health Standards
 - **Subpart:** Z
 - **Subpart Title:** Toxic and Hazardous Substances
 - **Standard Number:** 1910.1096
 - **Title:** Ionizing radiation.
 - **GPO Source:** e-CFR
-

1910.1096(a)

Definitions applicable to this section.

1910.1096(a)(1)

Radiation includes alpha rays, beta rays, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles; but such term does not include sound or radio waves, or visible light, or infrared or ultraviolet light.

1910.1096(a)(2)

Radioactive material means any material which emits, by spontaneous nuclear disintegration, corpuscular or electromagnetic emanations.

1910.1096(a)(3)

Restricted area means any area access to which is controlled by the employer for purposes of protection of individuals from exposure to radiation or radioactive materials.

1910.1096(a)(4)

Unrestricted area means any area access to which is not controlled by the employer for purposes of protection of individuals from exposure to radiation or radioactive materials.

1910.1096(a)(5)

Dose means the quantity of ionizing radiation absorbed, per unit of mass, by the body or by any portion of the body. When the provisions in this section specify a dose during a period of time, the dose is the total quantity of radiation absorbed, per unit of mass, by the body or by any portion of the body during such period of time. Several different units of dose are in current use. Definitions of units used in this section are set forth in paragraphs (a)(6) and (7) of this section.

1910.1096(a)(6)

Rad means a measure of the dose of any ionizing radiation to body tissues in terms of the energy absorbed per unit of mass of the tissue. One rad is the dose corresponding to the absorption of 100 ergs per gram of tissue (1 millirad (mrad)=0.001 rad).

1910.1096(a)(7)

Rem means a measure of the dose of any ionizing radiation to body tissue in terms of its estimated biological effect relative to a dose of 1 roentgen (r) of X-rays (1 millirem (mrem)=0.001 rem). The relation of the rem to other dose units depends upon the biological effect under consideration and upon the conditions for irradiation. Each of the following is considered to be equivalent to a dose of 1 rem:

1910.1096(a)(7)(i)

A dose of 1 roentgen due to X- or gamma radiation;

1910.1096(a)(7)(ii)

A dose of 1 rad due to X-, gamma, or beta radiation;

1910.1096(a)(7)(iii)

A dose of 0.1 rad due to neutrons or high energy protons;

1910.1096(a)(7)(iv)

A dose of 0.05 rad due to particles heavier than protons and with sufficient energy to reach the lens of the eye;

..1910.1096(a)(7)(v)

1910.1096(a)(7)(v)

If it is more convenient to measure the neutron flux, or equivalent, than to determine the neutron dose in rads, as provided in paragraph (a)(7)(iii) of this section, 1 rem of neutron radiation may, for purposes of the provisions in this section be assumed to be equivalent to 14 million neutrons per square centimeter incident upon the body; or, if there is sufficient information to estimate with reasonable accuracy the approximate distribution in energy of the neutrons, the incident number of neutrons per square centimeter equivalent to 1 rem may be estimated from Table G-17:

TABLE G-17 - NEUTRON FLUX DOSE EQUIVALENTS

Neutron energy (million electron volts (Mev))	Number of neutrons per square centimeter equivalent to a dose of 1 rem (neutrons/cm(2))	Average flux to deliver 100 millirem in 40 hours (neutrons/cm(2) per sec)
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Thermal	970 X 10(6)	670
0.0001	720 X 10(6)	500
0.005	820 X 10(6)	570
0.02	400 X 10(6)	280
0.1	120 X 10(6)	80
0.5	43 X 10(6)	30
1.0	26 X 10(6)	18
2.5	29 X 10(6)	20
5.0	26 X 10(6)	18
7.5	24 X 10(6)	17
10	24 X 10(6)	17
10 to 30	14 X 10(6)	10

1910.1096(a)(8)

For determining exposures to X- or gamma rays up to 3 Mev., the dose limits specified in this section may be assumed to be equivalent to the "air dose". For the purpose of this section **air dose** means that the dose is measured by a properly calibrated appropriate instrument in air at or near the body surface in the region of the highest dosage rate.

1910.1096(b)

Exposure of individuals to radiation in restricted areas.

1910.1096(b)(1)

Except as provided in paragraph (b)(2) of this section, no employer shall possess, use, or transfer sources of ionizing radiation in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from sources in the employer's possession or control a dose in excess of the limits specified in Table G-18:

TABLE G-18

	Rems per calendar quarter
Whole body: Head and trunk; active blood-forming organs; lens of eyes; or gonads	1 1/4
Hands and forearms; feet and ankles	18 3/4
Skin of whole body	7 1/2

1910.1096(b)(2)

An employer may permit an individual in a restricted area to receive doses to the whole body greater than those permitted under subparagraph (1) of this paragraph, so long as:

1910.1096(b)(2)(i)

During any calendar quarter the dose to the whole body shall not exceed 3 rems; and

.. **1910.1096(b)(2)(ii)**

1910.1096(b)(2)(ii)

The dose to the whole body, when added to the accumulated occupational dose to the whole body, shall not exceed 5 (N-18) rems, where "N" equals the individual's age in years at his last birthday; and

1910.1096(b)(2)(iii)

The employer maintains adequate past and current exposure records which show that the addition of such a dose will not cause the individual to exceed the amount authorized in this subparagraph. As used in this subparagraph **Dose to the whole body** shall be deemed to include any dose to the whole body, gonad, active bloodforming organs, head and trunk, or lens of the eye.

1910.1096(b)(3)

No employer shall permit any employee who is under 18 years of age to receive in any period of one calendar quarter a dose in excess of 10 percent of the limits specified in Table G-18.

1910.1096(b)(4)

Calendar quarter means any 3-month period determined as follows:

1910.1096(b)(4)(i)

The first period of any year may begin on any date in January: **Provided**, That the second, third, and fourth periods accordingly begin on the same date in April, July, and October, respectively, and that the fourth period extends into January of the succeeding year, if necessary to complete a 3-month quarter. During the first year of use of this method of determination, the first period for that year shall also include any additional days in January preceding the starting date for the first period; or

1910.1096(b)(4)(ii)

The first period in a calendar year of 13 complete, consecutive calendar weeks; the second period in a calendar year of 13 complete, consecutive weeks; the third period in a calendar year of 13 complete, consecutive calendar weeks; the fourth period in a calendar year of 13 complete, consecutive calendar weeks. If at the end of a calendar year there are any days not falling within a complete calendar week of that year, such days shall be included within the last complete calendar week of that year. If at the beginning of any calendar year there are days not falling within a

complete calendar week of that year, such days shall be included within the last complete calendar week of the previous year; or

1910.1096(b)(4)(iii)

The four periods in a calendar year may consist of the first 14 complete, consecutive calendar weeks; the next 12 complete, consecutive calendar weeks, the next 14 complete, consecutive calendar weeks, and the last 12 complete, consecutive calendar weeks. If at the end of a calendar year there are any days not falling within a complete calendar week of that year, such days shall be included (for purposes of this section) within the last complete calendar week of the year. If at the beginning of any calendar year there are days not falling within a complete calendar week of that year, such days shall be included (for purposes of this section) within the last complete week of the previous year.

1910.1096(c)

Exposure to airborne radioactive material.

1910.1096(c)(1)

No employer shall possess, use or transport radioactive material in such a manner as to cause any employee, within a restricted area, to be exposed to airborne radioactive material in an average concentration in excess of the limits specified in Table 1 of appendix B to 10 CFR part 20. The limits given in Table 1 are for exposure to the concentrations specified for 40 hours in any workweek of 7 consecutive days. In any such period where the number of hours of exposure is less than 40, the limits specified in the table may be increased proportionately. In any such period where the number of hours of exposure is greater than 40, the limits specified in the table shall be decreased proportionately.

1910.1096(c)(2)

No employer shall possess, use, or transfer radioactive material in such a manner as to cause any individual within a restricted area, who is under 18 years of age, to be exposed to airborne radioactive material in an average concentration in excess of the limits specified in Table II of appendix B to 10 CFR part 20. For purposes of this paragraph, concentrations may be averaged over periods not greater than 1 week.

1910.1096(c)(3)

Exposed as used in this paragraph means that the individual is present in an airborne concentration. No allowance shall be made for the use of protective clothing or equipment, or particle size.

1910.1096(d)

Precautionary procedures and personal monitoring.

1910.1096(d)(1)

Every employer shall make such surveys as may be necessary for him to comply with the provisions in this section. **Survey** means an evaluation of the radiation hazards incident to the production, use,

release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

..1910.1096(d)(2)

1910.1096(d)(2)

Every employer shall supply appropriate personnel monitoring equipment, such as film badges, pocket chambers, pocket dosimeters, or film rings, and shall require the use of such equipment by:

1910.1096(d)(2)(i)

Each employee who enters a restricted area under such circumstances that he receives, or is likely to receive, a dose in any calendar quarter in excess of 25 percent of the applicable value specified in paragraph (b)(1) of this section; and

1910.1096(d)(2)(ii)

Each employee under 18 years of age who enters a restricted area under such circumstances that he receives, or is likely to receive, a dose in any calendar quarter in excess of 5 percent of the applicable value specified in paragraph (b)(1) of this section; and

1910.1096(d)(2)(iii)

Each employee who enters a high radiation area.

1910.1096(d)(3)

As used in this section:

1910.1096(d)(3)(i)

Personnel monitoring equipment means devices designed to be worn or carried by an individual for the purpose of measuring the dose received (e.g., film badges, pocket chambers, pocket dosimeters, film rings, etc.);

1910.1096(d)(3)(ii)

Radiation area means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any 1 hour a dose in excess of 5 millirem, or in any 5 consecutive days a dose in excess of 100 millirem; and

1910.1096(d)(3)(iii)

High radiation area means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any one hour a dose in excess of 100 millirem.

1910.1096(e)

Caution signs, labels, and signals -

1910.1096(e)(1)

General.

1910.1096(e)(1)(i)

Symbols prescribed by this paragraph shall use the conventional radiation caution colors (magenta or purple on yellow background). The symbol prescribed by this paragraph is the conventional three-bladed design:

FIGURE G-10 RADIATION SYMBOL
(For Figure G-10, [Click Here](#))

1910.1096(e)(2)

Radiation area. Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in subparagraph (1) of this paragraph and the words:

CAUTION
RADIATION AREA

1910.1096(e)(3)

High radiation area.

1910.1096(e)(3)(i)

Each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION
HIGH RADIATION AREA

..1910.1096(e)(3)(ii)

1910.1096(e)(3)(ii)

Each high radiation area shall be equipped with a control device which shall either cause the level of radiation to be reduced below that at which an individual might receive a dose of 100 millirems in 1 hour upon entry into the area or shall energize a conspicuous visible or audible alarm signal in such a manner that the individual entering and the employer or a supervisor of the activity are made aware of the entry. In the case of a high radiation area established for a period of 30 days or less, such control device is not required.

1910.1096(e)(4)

Airborne radioactivity area.

1910.1096(e)(4)(i)

As used in the provisions of this section, ***airborne radioactivity area*** means:

1910.1096(e)(4)(i)(a)

Any room, enclosure, or operating area in which airborne radioactive materials, composed wholly or partly of radioactive material, exist in concentrations in excess of the amounts specified in column 1 of Table 1 of appendix B to 10 CFR part 20 or

1910.1096(e)(4)(i)(b)

Any room, enclosure, or operating area in which airborne radioactive materials exist in concentrations which, averaged over the number of hours in any week during which individuals are in the area, exceed 25 percent of the amounts specified in column 1 of Table 1 of appendix B to 10 CFR part 20.

1910.1096(e)(4)(ii)

Each airborne radioactivity area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in paragraph (e)(1) of this section and the words:

CAUTION

AIRBORNE RADIOACTIVITY AREA

1910.1096(e)(5)

Additional requirements.

1910.1096(e)(5)(i)

Each area or room in which radioactive material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in any amount exceeding 10 times the quantity of such material specified in appendix C to 10 CFR part 20 shall be conspicuously posted with a sign or signs bearing the radiation caution symbol described in paragraph (e)(1) of this section and the words:

CAUTION

RADIOACTIVE MATERIALS

1910.1096(e)(5)(ii)

Each area or room in which natural uranium or thorium is used or stored in an amount exceeding 100 times the quantity of such material specified in 10 CFR part 20 shall be conspicuously posted

with a sign or signs bearing the radiation caution symbol described in paragraph (e)(1) of this section and the words:

CAUTION
RADIOACTIVE MATERIALS

1910.1096(e)(6)

Containers.

1910.1096(e)(6)(i)

Each container in which is transported, stored, or used a quantity of any radioactive material (other than natural uranium or thorium) greater than the quantity of such material specified in appendix C to 10 CFR part 20 shall bear a durable, clearly visible label bearing the radiation caution symbol described in paragraph (e)(1) of this section and the words:

CAUTION
RADIOACTIVE MATERIALS

1910.1096(e)(6)(ii)

Each container in which natural uranium or thorium is transported, stored, or used in a quantity greater than 10 times the quantity specified in appendix C to 10 CFR part 20 shall bear a durable, clearly visible label bearing the radiation caution symbol described in paragraph (e)(1) of this section and the words:

CAUTION
RADIOACTIVE MATERIALS

1910.1096(e)(6)(iii)

Notwithstanding the provisions of paragraphs (e)(6)(i) and (ii) of this section a label shall not be required:

..1910.1096(e)(6)(iii)(a)

1910.1096(e)(6)(iii)(a)

If the concentration of the material in the container does not exceed that specified in column 2 of Table 1 of appendix B to 10 CFR part 20, or

1910.1096(e)(6)(iii)(b)

For laboratory containers, such as beakers, flasks, and test tubes, used transiently in laboratory procedures, when the user is present.

1910.1096(e)(6)(iv)

Where containers are used for storage, the labels required in this subparagraph shall state also the quantities and kinds of radioactive materials in the containers and the date of measurement of the quantities.

1910.1096(f)

Immediate evacuation warning signal -

1910.1096(f)(1)

Signal characteristics.

1910.1096(f)(1)(i)

The signal shall be a midfrequency complex sound wave amplitude modulated at a subsonic frequency. The complex sound wave in free space shall have a fundamental frequency (f(1)) between 450 and 500 hertz (Hz) modulated at a subsonic rate between 4 and 5 hertz.

1910.1096(f)(1)(ii)

The signal generator shall not be less than 75 decibels at every location where an individual may be present whose immediate, rapid, and complete evacuation is essential.

1910.1096(f)(1)(iii)

A sufficient number of signal units shall be installed such that the requirements of paragraph (f)(1)(ii) of this section are met at every location where an individual may be present whose immediate, rapid, and complete evacuation is essential.

1910.1096(f)(1)(iv)

The signal shall be unique in the plant or facility in which it is installed.

1910.1096(f)(1)(v)

The minimum duration of the signal shall be sufficient to insure that all affected persons hear the signal.

1910.1096(f)(1)(vi)

The signal-generating system shall respond automatically to an initiating event without requiring any human action to sound the signal.

1910.1096(f)(2)

Design objectives.

1910.1096(f)(2)(i)

The signal-generating system shall be designed to incorporate components which enable the system to produce the desired signal each time it is activated within one-half second of activation.

1910.1096(f)(2)(ii)

The signal-generating system shall be provided with an automatically activated secondary power supply which is adequate to simultaneously power all emergency equipment to which it is connected, if operation during power failure is necessary, except in those systems using batteries as the primary source of power.

..1910.1096(f)(2)(iii)

1910.1096(f)(2)(iii)

All components of the signal-generating system shall be located to provide maximum practicable protection against damage in case of fire, explosion, corrosive atmosphere, or other environmental extremes consistent with adequate system performance.

1910.1096(f)(2)(iv)

The signal-generating system shall be designed with the minimum number of components necessary to make it function as intended, and should utilize components which do not require frequent servicing such as lubrication or cleaning.

1910.1096(f)(2)(v)

Where several activating devices feed activating information to a central signal generator, failure of any activating device shall not render the signal-generator system inoperable to activating information from the remaining devices.

1910.1096(f)(2)(vi)

The signal-generating system shall be designed to enhance the probability that alarm occurs only when immediate evacuation is warranted. The number of false alarms shall not be so great that the signal will come to be disregarded and shall be low enough to minimize personal injuries or excessive property damage that might result from such evacuation.

1910.1096(f)(3)

Testing.

1910.1096(f)(3)(i)

Initial tests, inspections, and checks of the signal-generating system shall be made to verify that the fabrication and installation were made in accordance with design plans and specifications and to develop a thorough knowledge of the performance of the system and all components under normal and hostile conditions.

1910.1096(f)(3)(ii)

Once the system has been placed in service, periodic tests, inspections, and checks shall be made to minimize the possibility of malfunction.

1910.1096(f)(3)(iii)

Following significant alterations or revisions to the system, tests and checks similar to the initial installation tests shall be made.

1910.1096(f)(3)(iv)

Tests shall be designed to minimize hazards while conducting the tests.

1910.1096(f)(3)(v)

Prior to normal operation the signal-generating system shall be checked physically and functionally to assure reliability and to demonstrate accuracy and performance. Specific tests shall include:

1910.1096(f)(3)(v)(a)

All power sources.

1910.1096(f)(3)(v)(b)

Calibration and calibration stability.

1910.1096(f)(3)(v)(c)

Trip levels and stability.

1910.1096(f)(3)(v)(d)

Continuity of function with loss and return of required services such as AC or DC power, air pressure, etc.

1910.1096(f)(3)(v)(e)

All indicators.

1910.1096(f)(3)(v)(f)

Trouble indicator circuits and signals, where used.

..1910.1096(f)(3)(v)(g)

1910.1096(f)(3)(v)(g)

Air pressure (if used)

1910.1096(f)(3)(v)(h)

Determine that sound level of the signal is within the limit of paragraph (f)(1)(ii) of this section at all points that require immediate evacuation.

1910.1096(f)(3)(vi)

In addition to the initial startup and operating tests, periodic scheduled performance tests and status checks must be made to insure that the system is at all times operating within design limits and capable of the required response. Specific periodic tests or checks or both shall include:

1910.1096(f)(3)(vi)(a)

Adequacy of signal activation device.

1910.1096(f)(3)(vi)(b)

All power sources.

1910.1096(f)(3)(vi)(c)

Function of all alarm circuits and trouble indicator circuits including trip levels.

1910.1096(f)(3)(vi)(d)

Air pressure (if used).

1910.1096(f)(3)(vi)(e)

Function of entire system including operation without power where required.

1910.1096(f)(3)(vi)(f)

Complete operational tests including sounding of the signal and determination that sound levels are adequate.

1910.1096(f)(3)(vii)

Periodic tests shall be scheduled on the basis of need, experience, difficulty, and disruption of operations. The entire system should be operationally tested at least quarterly.

1910.1096(f)(3)(viii)

All employees whose work may necessitate their presence in an area covered by the signal shall be made familiar with the actual sound of the signal-preferably as it sounds at their work location. Before placing the system into operation, all employees normally working in the area shall be made acquainted with the signal by actual demonstration at their work locations.

1910.1096(g)

Exceptions from posting requirements. Notwithstanding the provisions of paragraph (e) of this section:

1910.1096(g)(1)

A room or area is not required to be posted with a caution sign because of the presence of a sealed source, provided the radiation level 12 inches from the surface of the source container or housing does not exceed 5 millirem per hour.

..1910.1096(g)(2)

1910.1096(g)(2)

Rooms or other areas in onsite medical facilities are not required to be posted with caution signs because of the presence of patients containing radioactive material, provided that there are personnel in attendance who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established in the provisions of this section.

1910.1096(g)(3)

Caution signs are not required to be posted at areas or rooms containing radioactive materials for periods of less than 8 hours: **Provided**, That

1910.1096(g)(3)(i)

The materials are constantly attended during such periods by an individual who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive materials in excess of the limits established in the provisions of this section; and

1910.1096(g)(3)(ii)

Such area or room is subject to the employer's control.

1910.1096(h)

Exemptions for radioactive materials packaged for shipment. Radioactive materials packaged and labeled in accordance with regulations of the Department of Transportation published in 49 CFR Chapter I, are exempt from the labeling and posting requirements of this subpart during shipment, provided that the inside containers are labeled in accordance with the provisions of paragraph (e) of this section.

1910.1096(i)

"Instruction of personnel, posting."

1910.1096(i)(1)

Employers regulated by the Nuclear Regulatory Commission shall be governed by 10 CFR part 20 standards. Employers in a State named in paragraph (p)(3) of this section shall be governed by the requirements of the laws and regulations of that State. All other employers shall be regulated by the following:

1910.1096(i)(2)

All individuals working in or frequenting any portion of a radiation area shall be informed of the occurrence of radioactive materials or of radiation in such portions of the radiation area; shall be instructed in the safety problems associated with exposure to such materials or radiation and in precautions or devices to minimize exposure; shall be instructed in the applicable provisions of this section for the protection of employees from exposure to radiation or radioactive materials; and shall be advised of reports of radiation exposure which employees may request pursuant to the regulations in this section.

1910.1096(i)(3)

Each employer to whom this section applies shall post a current copy of its provisions and a copy of the operating procedures applicable to the work conspicuously in such locations as to insure that employees working in or frequenting radiation areas will observe these documents on the way to and from their place of employment, or shall keep such documents available for examination of employees upon request.

1910.1096(j)

Storage of radioactive materials. Radioactive materials stored in a non-radiation area shall be secured against unauthorized removal from the place of storage.

..1910.1096(k)

1910.1096(k)

Waste disposal. No employer shall dispose of radioactive material except by transfer to an authorized recipient, or in a manner approved by the Nuclear Regulatory Commission or a State named in paragraph (p)(3) of this section.

1910.1096(l)

Notification of incidents -

1910.1096(l)(1)

Immediate notification. Each employer shall immediately notify the Assistant Secretary of Labor or his duly authorized representative, for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR part 20; paragraph (p)(2) of this section, or the requirements of the laws and regulations of States named in paragraph (p)(3) of this section, by telephone or telegraph of any incident involving radiation which may have caused or threatens to cause:

1910.1096(l)(1)(i)

Exposure of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the whole body of any individual to 150 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms of any individual to 375 rems or more of radiation; or

1910.1096(l)(1)(ii)

The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limit specified for such materials in Table II of appendix B to 10 CFR part 20.

1910.1096(l)(2)

Twenty-four hour notification. Each employer shall within 24 hours following its occurrence notify the Assistant Secretary of Labor or his duly authorized representative for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR part 20; paragraph (p)(2) of this section, or the requirements of the laws and applicable regulations of States named in paragraph (p)(3) of this section, by telephone or telegraph of any incident involving radiation which may have caused or threatens to cause:

1910.1096(l)(2)(i)

Exposure of the whole body of any individual to 5 rems or more of radiation; exposure of the skin of the whole body of any individual to 30 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms to 75 rems or more of radiation; or

1910.1096(l)(2)(ii)

[Reserved]

..1910.1096(m)

1910.1096(m)

"Reports of overexposure and excessive levels and concentrations."

1910.1096(m)(1)

In addition to any notification required by paragraph (1) of this section each employer shall make a report in writing within 30 days to the Assistant Secretary of Labor or his duly authorized representative, for employees not protected by the Nuclear Regulatory Commission by means of 10 CFR part 20; or under paragraph (p)(2) of this section, or the requirements of the laws and regulations of States named in paragraph (p)(3) of this section, of each exposure of an individual to radiation or concentrations of radioactive material in excess of any applicable limit in this section. Each report required under this paragraph shall describe the extent of exposure of persons to radiation or to radioactive material; levels of radiation and concentration of radioactive material involved, the cause of the exposure, levels of concentrations; and corrective steps taken or planned to assure against a recurrence.

1910.1096(m)(2)

In any case where an employer is required pursuant to the provisions of this paragraph to report to the U.S. Department of Labor any exposure of an individual to radiation or to concentrations of radioactive material, the employer shall also notify such individual of the nature and extent of exposure. Such notice shall be in writing and shall contain the following statement: "You should preserve this report for future reference."

1910.1096(n)

"Records."

1910.1096(n)(1)

Every employer shall maintain records of the radiation exposure of all employees for whom personnel monitoring is required under paragraph (d) of this section and advise each of his employees of his individual exposure on at least an annual basis.

1910.1096(n)(2)

Every employer shall maintain records in the same units used in tables in paragraph (b) of this section and appendix B to 10 CFR part 20.

1910.1096(o)

"Disclosure to former employee of individual employee's record."

1910.1096(o)(1)

At the request of a former employee an employer shall furnish to the employee a report of the employee's exposure to radiation as shown in records maintained by the employer pursuant to paragraph (n)(1) of this section. Such report shall be furnished within 30 days from the time the request is made, and shall cover each calendar quarter of the individual's employment involving exposure to radiation or such lesser period as may be requested by the employee. The report shall also include the results of any calculations and analysis of radioactive material deposited in the body of the employee. The report shall be in writing and contain the following statement: "You should preserve this report for future reference."

1910.1096(p)

"Nuclear Regulatory Commission licensees - NRC contractors operating NRC plants and facilities - NRC Agreement State licensees or registrants."

1910.1096(p)(1)

Any employer who possesses or uses source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended, under a license issued by the Nuclear Regulatory Commission and in accordance with the requirements of 10 CFR part 20 shall be deemed to be in compliance with the requirements of this section with respect to such possession and use.

1910.1096(p)(2)

NRC contractors operating NRC plants and facilities: Any employer who possesses or uses source material, byproduct material, special nuclear material, or other radiation sources under a contract with the Nuclear Regulatory Commission for the operation of NRC plants and facilities and in accordance with the standards, procedures, and other requirements for radiation protection established by the Commission for such contract pursuant to the Atomic Energy Act of 1954 as amended (42 U.S.C. 2011 et seq.), shall be deemed to be in compliance with the requirements of this section with respect to such possession and use.

1910.1096(p)(3)

NRC-agreement State licensees or registrants:

1910.1096(p)(3)(i)

"Atomic Energy Act sources." Any employer who possesses or uses source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has either registered such sources with, or is operating under a license issued by, a State which has an agreement in effect with the Nuclear Regulatory Commission pursuant to section 274(b) (42 U.S.C. 2021(b)) of the Atomic Energy Act of 1954, as amended, and in accordance with the requirements of that State's laws and regulations shall be deemed to be in compliance with the radiation requirements of this section, insofar as his possession and use of such material is concerned, unless the Secretary of Labor, after conference with the Nuclear Regulatory Commission, shall determine that the State's program for control of these radiation sources is incompatible with the requirements of this section. Such agreements currently are in effect only in the States of Alabama, Arkansas, California, Kansas, Kentucky, Florida, Mississippi, New Hampshire, New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

1910.1096(p)(3)(ii)

"Other sources." Any employer who possesses or uses radiation sources other than source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has either registered such sources with, or is operating under a license issued by a State which has an agreement in effect with the Nuclear Regulatory Commission pursuant to section 274(b) (42 U.S.C. 2021(b)) of the Atomic Energy Act of 1954, as amended, and in accordance with the requirements of that State's laws and regulations shall be deemed to be in compliance with the radiation requirements of this section, insofar as his possession and use of such material is concerned, provided the State's program for control of these radiation sources is the subject of a currently effective determination by the Assistant Secretary of Labor that such program is compatible with the requirements of this section. Such determinations currently are in effect only in the States of Alabama, Arkansas, California, Kansas, Kentucky, Florida, Mississippi, New Hampshire, New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

[39 FR 23502, June 27, 1974, as amended at 43 FR 49746, Oct. 24, 1978; 43 FR 51759, Nov. 7, 1978; 49 FR 18295, Apr. 30, 1984; 58 FR 35309, June 30, 1993; 61 FR 5507, Feb. 13, 1996; 61 FR 31427, June 20, 1996]

Model 3019

Digital Background Survey Meter

Features

- Large Backlit LCD for Ease of Reading
- Autoranging - Hands Free
- Sigma Audio and Bright LED Simplifies Searching
- Light Weight and Ruggedly Built
- Splash-Resistant Construction for Outdoor Use
- 4-Button Intuitive Interface for Easy Operation
- All-Digital Calibration; USB Port
- Rate, Max, and Count Modes of Operation
- Shipped Calibrated & Ready-to-Go



Part Number: 48-4091

Introduction

The Model 3019 is an ergonomically-designed, low-weight digital background survey meter used for background measurements of gamma radiation levels up to 500 $\mu\text{Sv/hr}$ (50 mR/hr). An internally installed CsI scintillator provides 175 cpm/ $\mu\text{R/hr}$ sensitivity. This instrument's alarm set points can be designated through Setup Mode using the onboard keypad, or alternatively by USB connection via the optional software.

Other features include a large, easily-readable LCD (liquid crystal display), piercing audio warning tone, and easy, intuitive design. Splash-resistant construction matched with a unit body made of durable, high-impact plastic enables this instrument to be used indoors or outdoors. The padded handle is shipped pre-configured for datalogging operations with the built-in

logging push button and warning light, making the device ready if the customer chooses to acquire the optional datalog software.

Operators can access setting adjustments, including calibration constant, dead time correction, efficiency, high voltage, high voltage current overload level, pulse threshold, response time (fast or slow), count time, operational modes (Rate, Max, or Count), and minimum and maximum display levels. Primary and Secondary units, unit alarm levels, count units, count alarm levels, and zero pulse protection time limit. Another alarm, the sigma audio feature, assists search efforts by issuing an audible alarm when radiation levels outside set parameters are detected. An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from inadvertent modification.

Specifications

DETECTOR: internal CsI scintillator with 175 cpm/ $\mu\text{R/hr}$ sensitivity

ALARMS: alarm setpoints adjustable over the display range

SIGMA: sigma audio beeps when radiation level changes (if enabled)

LOSS OF COUNT ALARM PROTECTION: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3-digit LCD with large 20 mm (0.8 in.) digits, (k)cps, (k)cpm,

(kBq), (k)dpm, ($\mu\text{R/hr}$), ($\mu\text{Sv/hr}$), low-battery indicator, MAX, ALARM, AUDIO

DETECTOR RANGE: 0 to 500 $\mu\text{Sv/hr}$ (50 mR/hr)

ENERGY RANGE: 20 keV to 3 MeV

BACKLIGHT: built-in ambient light sensor automatically activates low-power LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life)

USER CONTROLS:

- ON/OFF/ACK - press to turn ON, tap to acknowledge alarms and silence alarm tone, hold for OFF
- MODE - alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes)
- AUDIO - turn "click" audio On/Off
- UNITS - changes the units between count rate (cpm, cps), dose/exposure ($\mu\text{Sv/hr}$, mR/hr), or disintegration (dpm, Bq)

RESPONSE TIME: user-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

AUDIO: greater than 75 dB at 0.6 m (2 ft), approximately 4.5 kHz

POWER: four alkaline or four rechargeable "AA" batteries (instrument does not support in-device charging)

BATTERY LIFE: approximately 750 hours of operation (as low as 100 hours with backlight configured for continuous-on). 16-hour low battery warning

CONSTRUCTION: high-impact plastic with water-resistant rubber seals and separate battery compartment

TEMPERATURE RANGE: -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

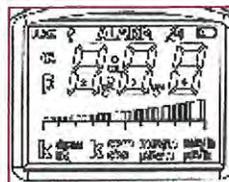
ENVIRONMENTAL RATING: NEMA (National Electrical Manufacturers Association) rating of 4x or IP (Ingress Protection) rating of 65

SIZE: 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.) (H x W x L)

WEIGHT: 1.06 kg (2.3 lb)

OPTIONS: Lumic Calibration Kit - Part Number 4498-1018, includes software and required cable

Lumic Datalog Kit - Part Number 4498-1019, includes software and required cable



Ludlum Measurements, Inc.

May 2017

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: ludlum@ludlums.com

Note: specifications subject to change without notification. We are not responsible for errors or omissions.

Model 702i Isotope Identifier/MicroR Meter



Ludlum Measurements, Inc.

Key Features

- Identifies Mixed Isotopes in One Second
- Provides Total Dose Rate & Dose Rate by Isotope Instantly
- Internally Housed NaI Detector
- Ethernet Connectivity for Remote Operation

Additional Features

- Single-Handed Operation
- User and Administrator Operating Modes
- Sunlight Readable LCD
- Compact Flash Card Spectra Storage
- Quadratic Compression Conversion (QCC)

Applications

- Emergency Response
- Law Enforcement
- Homeland Security
- Undercover Surveillance
- Industrial & HAZMAT
- Medical & Health Physics
- Radiation Safety
- Passenger and Freight Monitoring
- Non-Proliferation Enforcement
- Environmental Waste Monitoring



Part Number: 48-3800



Introduction

The Model 702i Isotope Identifier and MicroR radiation surveillance and measurement system was developed to provide end users such as first responders a simple tool to quickly locate abnormal levels of radioactivity and accurately identify the isotopes present. It additionally offers several advanced features for well-trained experts seeking to perform more detailed analysis either in the field or in a laboratory. Connection to a PC is available via a built-in Ethernet connection where stored or real-time collected data can be processed by optional isotopic analysis programs.

It employs time-slicing and patented Quadratic Compression Conversion (QCC) technology that delivers improved energy resolution, real-time background subtraction, and the highest degree of sensitivity. Trace amount of ⁴⁰K are embedded to provide gain stabilization and self-calibration. All captured spectra data are stored to a removable compact flash card in ANSI N42.42 standard format. This convenient storage medium permits quick review of data as well as allowing virtually an unlimited number of spectra to be collected while in the field.

The instrument's design is optimized for ease of portability, user-friendliness, and rugged use out in the field. The ergonomic shape and overall balance allow the Model 702i to be operated with a single (gloved) hand, with easy thumb access to a set of large tactile-type control buttons. The detector is internal, allowing for a sensitive but compact isotope identification instrument.

The 8.9 cm (3.5 in.) color LCD is a transreflective type that brightens with use in the bright sunlight conditions that typically render other types of LCDs useless. The employment of the different colors on the different displays is intelligently applied to signify the appropriate activity levels for capturing spectra, labeling isotope categories, and presenting alarms. Audible feedback and voice alerts further enhance the user interface.

The instrument is powered with eight internal rechargeable AA NiMH batteries, and comes with a universal (110-240 V, 50/60 Hz) AC power supply, adapter (depending on system revision), and has a 9V fused accessory adapter.

P.O. Box 810, Sweetwater, Texas 79558 / <http://www.ludlums.com>
Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4872 / Email: ludlum@ludlums.com

Apr 2015

View Message

Dept Msg #: DM2018-2361

Sent By: HDQTRSOP

Date: 4/11/2018 10:05 AM

Code: MISC71 (REV 9/14/17)

Subject: TRANSFER STATION RADIOACTIVE ALARM PROCEDURE



Close

The New York City Department of Health has informed the New York City Department of Sanitation that Sanitation Workers who collect ordinary household refuse commingled with waste that indicates low levels of radioactivity on monitoring devices (e.g. waste generated by persons receiving radiation treatment for cancer or other medical conditions) will not incur an increased health risk as a result of handling this waste.

In the event that the low level radiation detector alarm is activated:

- 1) The transfer station's representative shall immediately notify the DSNY Site Supervisor and the Transfer Station Manager. The DSNY Site Supervisor or the Transfer Station Manager shall notify the Operations Control Office of *Solid Waste Management* at the following phone numbers: 646 885-5012, 4702, 4703, 4700.
- 2) The relay driver, or the driver and loader of the vehicle shall be instructed to exit the vehicle and walk through the alarm system to ensure that the vehicle is actually activating the low level alarm system and that the workers have no effect on the low level monitoring device.
- 3) The driver will then be instructed to move the vehicle to a designated area identified by the transfer station manager or the DSNY Site Supervisor with the exception of the Hamilton Avenue MTS, IESI Court St and IESI 50th St. facilities in which case the following supplemental procedures will be followed:

Hamilton Avenue, IESI 50th Street AND IESI Court Street

=====
Arrangements will be made through proper channels to have the truck transported by the relay driver to 52nd St. (BKS 7, 10) where it will be stored along the outside of the salt shed fence. E.P.U. will investigate and clear truck for dumping at the appropriate time.

- 4) The driver will report to the DSNY Site Supervisor or in his/her absence, to the transfer station manager and call his/her work location for transportation back to his/her work location.
- 5) The Operations Control Office will generate a SWM unusual occurrence report (DS779A) and call EPU to pick up the vehicle during the next day shift.

If a DSNY employee activates a low level alarm:

- 1) The DSNY Supervisor or Transfer Station Manager shall notify the Operations Control Office and Bureau Operations Office.
- 2) The Operations Control Office shall notify the EPU.
- 3) The EPU shall investigate and provide assistance and/or guidance to the Operations Office.

ATTACHMENT 11

ACCIDENT/INJURY REPORTING FORMS

- **UNUSUAL OCCURRENCE AND ACCIDENT REPORT**
- **EMPLOYEE'S NOTICE OF INJURY**
- **PROCEDURES FOR UNIFORMED EMPLOYEES REPORTING AND ELECTRONICALLY RECORDING A LINE OF DUTY INJURY (LODI)**
- **EMPLOYEES REPORTING SICK , L.O.D.I. OR WORKERS COMPENSATION**
- **WORKERS' COMPENSATION CLAIM INITIATION FORM**

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THE CITY OF NEW YORK Department of Sanitation
SWMU – UNUSUAL OCCURRENCE AND ACCIDENT REPORT
 DS 779A/SWMU 67 (REV.8/88)

LOG NO.

TYPE OF INCIDENT		DATE OF INCIDENT
TIME OF INCIDENT	ZONE	WEATHER
LOCATION		
INVOLVED		
INJURED		
DAMAGE		
WITNESS(ES)		
DESCRIPTION OF ACCIDENT OR OCCURRENCE		
RECEIVED FROM	DATE RECEIVED	TIME RECEIVED
PREPARED BY	APPROVED BY	

- DISTRIBUTION: ▪ Commissioner ▪ Deputy Commissioner ▪ Director, B.W.D. ▪ Director of Operations
 ▪ Operations Officer ▪ Operations Supp. Officer ▪ Director of B.C.C. ▪ Director of Public Affairs
 ▪ Inspector General ▪ Chief of H.D.D.

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sanitation

LINE OF DUTY INJURY / MEDICAL REPORT DS 807B (7-11)

DATE

DATE OF ALLEGED INJURY

ATTENTION: If this form is not completely filled out the Department of Sanitation will not make payment for services rendered Also, employee may not be paid because of lack of medical documentation.

I hereby authorized that this medical record be sent to the NYC Department of Sanitation.

EMPLOYEE'S SIGNATURE

TO BE FILLED OUT BY FACILITY

NAME OF HOSPITAL / EMERGENCY FACILITY	NAME OF PHYSICIAN (PRINT)
NAME OF PATIENT (PRINT)	REFERENCE NO. / SOC. SEC. NO. (LAST 4 DIGITS)

TO BE FILLED OUT BY PHYSICIAN

SUBJECTIVE COMPLAINT:
SIGNIFICANT PERTINENT HISTORY:
TESTS OR EXAMINATION DONE (RESULTS IF AVAILABLE):

CLINICAL

OBJECTIVE FINDINGS:
MEDICAL DIAGNOSIS:
TREATMENT:
CAN THIS BE SUBSTANTIATED AS A NEW INJURY? <input type="checkbox"/> YES <input type="checkbox"/> NO

PLEASE CHECK ONLY ONE OF THE FOLLOWING

- 1. No significant to minimal findings: employee capable of reporting to the Department of Sanitation Clinic **IMMEDIATELY**, (if Clinic is closed, then report next working day at 0700 hrs.)
- 2. Employee is capable of reporting to the Department of Sanitation Clinic tomorrow for physical assessment, (if Clinic is closed, then report next working day at 0700 hrs.)
- 3. Employee requires further treatment and can not report to the Department of Sanitation Clinic at this time. Employee can travel to the DSNY Clinic _____. Employee must call the Clinic immediately for instructions (212-437-4821/48) upon release from the hospital or treating facility.
- 4. Employee requires immediate hospitalization.

PLEASE CHECK APPROPRIATE BOX

- A. EMPLOYEE HAS NO CONTRA-INDICATION FOR UNDERGOING SUBSTANCE ABUSE TESTING AT THIS TIME.
- B. EMPLOYEE IS PHYSICALLY UNABLE TO UNDERGO A SUBSTANCE ABUSE TESTING (U.T.) AT THIS TIME.

Reason unable to test _____

SIGNATURE OF EXAMINING PHYSICIAN	TITLE	DATE
----------------------------------	-------	------

FOR SUPERVISOR'S USE ONLY (PRINT)

EMPLOYEE'S NAME	BADGE NO.	REF NO. / SOC. SEC. NO. (LAST 4 DIGITS)	PAYROLL DISTRICT
LOCATION	NAME OF PERSON WHO ACCOMPANIED INJURED EMPLOYEE TO EMERGENCY FACILITY		
DATE TOLD TO REPORT TO CLINIC	SUPERVISOR'S NAME		

NOTE: This form must be brought to Clinic by injured employee on first Clinic visit.

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NEW YORK STATE - DEPARTMENT OF LABOR
INJURY AND ILLNESS INCIDENT REPORT
 FORM SH 900.2

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

This *Injury and Illness Incident Report* is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the *Log of Work Related Injuries and Illnesses* and the accompanying *Summary*, these forms help the employer and PESH develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to 12NYCRR Part 801, PESH recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by _____
Title _____
Phone () _____ Date ____/____/____

Employee Information:

- 1) Full name _____
- 2) Street _____
City _____ State _____ Zip _____
- 3) Date of birth ____/____/____ 4) Date hired ____/____/____
- 5) Male Female

14) **What was the employee doing just before the incident occurred?** Describe the activity, as well as the tools, equipment, or material the employee was using. Be specific. *Examples:* "climbing a ladder while carrying roofing materials", "spraying chlorine from hand sprayer."

15) **What happened?** Tell us how the injury occurred. *Examples:* "When ladder slipped on wet floor, worker fell 20 feet", "Worker was sprayed with chlorine when gasket broke during replacement."

16) **What was the injury or illness?** Tell us the part of the body that was affected; be more specific than "hurt", "pain", or "sore." *Examples:* "strained back", "chemical burn, hand."

17) **What object or substance directly harmed the employee?** *Examples:* "concrete floor", "radial arm saw", "chlorine."

18) **If the employee died, when did death occur?** Date of death ____/____/____

ILLNESS CASES ONLY	<input type="checkbox"/> Check this box if the employee independently and voluntarily requests that his or her name not be entered on the log. If checked, treat as a privacy concern case.
---------------------------	---

Physician/Health Care Professional Information:

- 6) Name of physician or other health care professional _____
- 7) If treatment was given away from the worksite, where was it given?
Facility _____
Street _____
City _____ State _____ Zip _____
- 8) Was employee treated in an emergency room?
 Yes No
- 9) Was employee hospitalized overnight?
 Yes No

Information about the case:

- 10) Case number from the *Log* _____
(Transfer the case number from the *Log* after you record the case.)
 - 11) Date of injury or illness ____/____/____
 - 12) Time employee began work _____ AM / PM
 - 13) Time of event _____ AM / PM
 Check if time cannot be determined
- Event occurred before during after work shift

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**THE CITY OF NEW YORK
DEPARTMENT OF SANITATION
GENERAL ORDER 2017-02**

EFFECTIVE DATE: January 9, 2017

SUBJECT: **PROCEDURES FOR UNIFORMED EMPLOYEES
REPORTING AND ELECTRONICALLY RECORDING
A LINE OF DUTY INJURY (LODI)**

AFFECTED DIRECTIVES: General Order 2012-20 is hereby cancelled.

REFERENCE: G.O. 2007-04 Medical Leave Control

**PROCEDURES FOR UNIFORMED EMPLOYEES CLAIMING A LINE OF DUTY
INJURY (LODI):**

The Supervisor's Responsibilities:

1. Upon being notified of and/or observing a LODI, immediate efforts will be made to evaluate the situation and for the injured employee to be brought to the nearest hospital for treatment. The emergency contact person(s) on file, on the DS 379 Personal Record Card, will be notified and given all pertinent details unless they were informed by the injured employee, or the employee elects to not have them notified. If a family member or emergency contact is not notified the supervisor must document this in the Unusual Incident Report (DS 779). In the event the injured employee has not been treated and released by the end of their shift, the emergency contact or a family member must be notified of their status. The investigating supervisor will provide a DS 807B (Appendix A) to the injured employee. **Supervisors do not have authority to permit an injured employee to continue working.** Borough or Unit locations must immediately be notified of the occurrence. Boroughs/Units will inform the Bureau Operations Office and an Unusual Incident (DS779) will be sent through channels in a timely manner, Email to unusual823@dsny.nyc.gov. Borough staff emailing the LODI unusual should follow-up with the Officer on Duty in Operations to confirm receipt of the unusual incident report and provide any additional information.

Investigating supervisors are required to complete the electronic DS 807 which is accessible from the DSNY Intranet page (Appendix B), under the DSNY Manuals banner by logging in with their personal password. Investigating supervisor must ensure completeness of section 1, then print out the form to have sections 2 and 3, completed and signed by all parties involved. Upon completion of sections 1, 2, and 3 with

necessary signatures, the form needs to be uploaded into the LODI tracking system for further processing. In the event an injured employee is unable to provide a hand written statement the Investigating Supervisor should get a verbal statement of how the LODI occurred, record it in section-2 and initial below the statement. **Blank DS 807 (Appendix C) and DS 807B paper forms must be kept in Supervisor's possession.** DS 807 paper forms will be used when online access to the digital form is unavailable. **The DS 807 and DS 807B must be completed within 24 hours.**

2. The Supervisor shall inform the injured employee that it is **his or her responsibility** to establish the claim of line-of-duty injury or illness by first having the attending physician at the hospital complete the DS 807B. He or she must bring it with them and submit it to the DSNY Health Care Facility (HCF) upon their first visit for the LODI.
3. The Supervisor shall inform injured employee that, unless hospitalized, they must report to the DSNY HCF with the completed DS 807B and a copy of the DS 807, with Sections 1,2, and 3 completed, the next day (unless otherwise noted on DS 807B or If the employee is injured on a Friday, Saturday, day prior to a holiday, or on a holiday, employee must report to the DSNY HCF the next calendar day that the DSNY HCF is open). Instruct employee, if he or she is not hospitalized and is medically incapable of reporting to the DSNY HCF, they must contact a HCF supervisor at 212-437-4848, or 4821.
4. The Supervisor shall prepare and distribute the following forms as indicated:
DS 807B: For injured employee to have filled out by attending Physician at the hospital and bring to the DSNY Medical Division- HCF

DS 807: One copy given to injured employee to bring to the DSNY HCF.

5. If the injured employee has not been treated and released by the end of the shift in which they were injured, the emergency contact or a family member must be notified of their status. The emergency contact will also be advised on the DSNY emergency transportation protocol (refer to General Order 2007-04). In the event an employee is hospitalized, a supervisor should attempt to secure the 807B, or equivalent document, from the hospital and submit it directly to:

NYC Department of Sanitation
Medical Division – HCF
44 Beaver Street
New York, NY 10004

Supervisors must also call the DSNY HCF, Hospitalization Unit, at 212-437-4831 to inform the Medical Division that an employee has been admitted to a hospital.

6. In case the electronic DS 807 is not accessible due to a power outage or a lack of internet access, the paper DS 807 will be utilized. Sections 1, 2 and 3 will be completed and signed and a copy given to the injured employee which they must bring to the DSNY-HCF. The form will then be processed by the District Superintendent and forwarded to Operations through proper channels with a paper copy being kept at each level.

One copy is to be kept at the injured employee's payroll location. Upon the digital DS 807 becoming available, the information contained on paper will be entered into the online system with the original document being scanned and uploaded for record keeping.

7. If the injured employee is not payroll assigned to the location in which the LODI occurred and is being processed, the investigating Supervisor shall notify the payroll location to insure the correct entries are made into HRMS and other record keeping.

Injured Employees Responsibilities:

In order to claim an injury/ illness as LODI, the employee making the claim must:

1. Notify work location supervisor immediately. Employee will be provided with a DS 807B to be filled out by attending Physician at the hospital.

ANY EMPLOYEE CLAIMING A LODI AT ANY TIME OTHER THAN ON THE DATE OF THE INJURY DURING THEIR SCHEDULED SHIFT WILL BE CARRIED SICK, NOT LODI!

2. Be transported to the nearest hospital for medical evaluation and/ or treatment and have the DS 807B form completed by the attending doctor.
3. The injured employee will provide a handwritten statement to be entered onto the printed DS 807 form (section 2). Upon completion of Sections 1, 2, and 3, with signatures from the investigating supervisor, injured employee, and witnesses, respectively, the investigating supervisor will scan and upload the DS 807 into the electronic tracking system and give a paper copy to the injured employee. Employees must submit the copy of the DS 807 and a DS 807 B to the DSNY Health Care Facility (HCF) sign-in window upon their first visit.
4. Injured employee must follow instructions as directed on the DS 807B with regard to reporting to the DSNY HCF. If an employee is not hospitalized, but feels he or she is medically incapable of reporting to the DSNY HCF, the employee must call the DSNY HCF to speak to a supervisor at 212-437-4848 or 212-437-4821. If the employee is injured on a Friday, Saturday, day prior to a holiday, or on a holiday, employee must report to the DSNY HCF the next calendar day that the HCF is open.

Except in the case of a life threatening emergency, employees must report to the DSNY HCF to receive prior medical authorization before seeking additional treatment (beyond that of the original emergency room evaluation, emergency treatment, or emergency admission to the hospital). Reporting to the HCF is also necessary before being authorized to resume regular or limited duty.

District Superintendent /Borough Operations Supt. Responsibilities:

1. Both the District Superintendent and the B.O.S will log into PeopleSoft twice daily (once in the beginning and once toward the end of the shift) to check on the status of any Pending LODI's that are in the system needing their approval.

2. District Superintendent reviews signed DS 807 and online attachments, adds comment, and certifies its completeness by initialing online.
3. BOS reviews uploaded signed forms and attachments and DS comments and certifies its completeness by initialing online.
4. Upon BOS approval and completion of the workflow status, the system generates an email to Medical Billing Unit advising of the completed status.

In the event of the digital system not being available, when the workflow status is **Completed**, the DS 807 form needs to be scanned and uploaded with attachments (DS 807B, photos, etc.) and sent via e-mail as attachments to : LODIDS807@DSNY.NYC.GOV. The subject line should be: LODI DS 807 – [reference number].

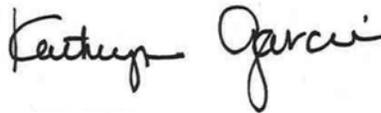
5. In the absence of the B.O.S. or the regular approving officer the Deputy Chief in Charge of the Work Unit/Location will approve the DS 807 as completed.

Is it the Location Supervisor's responsibility to ensure that all pertinent sections of this General Order are brought to the attention of all personnel under his or her command.

CANCELLATION:

This Order shall remain in effect until it is cancelled.

ISSUING AUTHORITY:



Kathryn Garcia
Commissioner

DISTRIBUTION:

All Management Personnel.

sanitation

APPENDIX "A"

LINE OF DUTY INJURY / MEDICAL REPORT DS 807B (7-11)

DATE

DATE OF ALLEGED INJURY

ATTENTION: If this form is not completely filled out the Department of Sanitation will not make payment for services rendered Also, employee may not be paid because of lack of medical documentation.

I hereby authorized that this medical record be sent to the NYC Department of Sanitation.

EMPLOYEE'S SIGNATURE

TO BE FILLED OUT BY FACILITY

NAME OF HOSPITAL / EMERGENCY FACILITY

NAME OF PHYSICIAN (PRINT)

NAME OF PATIENT (PRINT)

REFERENCE NO. / SOC. SEC. NO. (LAST 4 DIGITS)

TO BE FILLED OUT BY PHYSICIAN

SUBJECTIVE COMPLAINT:

SIGNIFICANT PERTINENT HISTORY:

TESTS OR EXAMINATION DONE (RESULTS IF AVAILABLE):

CLINICAL

OBJECTIVE FINDINGS:

MEDICAL DIAGNOSIS:

TREATMENT:

CAN THIS BE SUBSTANTIATED AS A NEW INJURY?

YES

NO

PLEASE CHECK ONLY ONE OF THE FOLLOWING

- 1. No significant to minimal findings: employee capable of reporting to the Department of Sanitation Clinic **IMMEDIATELY**, (If Clinic is closed, then report next working day at 0700 hrs.)
- 2. Employee is capable of reporting to the Department of Sanitation Clinic tomorrow for physical assessment, (If Clinic is closed, then report next working day at 0700 hrs.)
- 3. Employee requires further treatment and can not report to the Department of Sanitation Clinic at this time. Employee can travel to the DSNY Clinic _____. Employee must call the Clinic immediately for instructions (212-437-4821/48) upon release from the hospital or treating facility.
- 4. Employee requires immediate hospitalization.

PLEASE CHECK APPROPRIATE BOX

- A. EMPLOYEE HAS NO CONTRA-INDICATION FOR UNDERGOING SUBSTANCE ABUSE TESTING AT THIS TIME.
- B. EMPLOYEE IS PHYSICALLY UNABLE TO UNDERGO A SUBSTANCE ABUSE TESTING (U.T.) AT THIS TIME.

Reason unable to test _____

SIGNATURE OF EXAMINING PHYSICIAN

TITLE

DATE

FOR SUPERVISOR'S USE ONLY (PRINT)

EMPLOYEE'S NAME

BADGE NO.

REF NO. / SOC. SEC. NO. (LAST 4 DIGITS)

PAYROLL DISTRICT

LOCATION

NAME OF PERSON WHO ACCOMPANIED INJURED EMPLOYEE TO EMERGENCY FACILITY

DATE TOLD TO REPORT TO CLINIC

SUPERVISOR'S NAME

NOTE: This form must be brought to Clinic by injured employee on first Clinic visit.

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APPENDIX "B"

New York City Department of Sanitation (DSNY)



DS 807 LODI Form

Access from the DSNY Intranet Home Page

DSNY MANUALS, MAPS AND FORMS

DSNY Manuals (cscuser)
DS 807 LODI

DSNY PEOPLESOFT HR - Production Login

Username is full email address in **all CAPS** for Log In

User ID DBEAVER@DSNY.

Password

Sign In

Password is same as used for SMART/BladeRunner/Network

Attachments - to attach the witness and employee statements and any other supporting documents

Investigating Supervisor | Attachments

Incident Number: NEW Workflow Status: Started LODI-Help Return to Search

LODI File Attachments

Attached File	Type	Comments	Created By	Created Datetime	Add	View	Download
1							

Save Previous tab Next tab

Investigating Supervisor | Attachments

LODI Notes for Attachments

Incident Number: NEW

*Type:

*Status:

*File:

*Comments:



New York City Department of Sanitation (DSNY)

The DS807 LODI Form

Investigating Supervisor | Attachments | LODI-Help | Return to Search

Section 1 - To be completed by the Investigating Supervisor

Supervisor: Check here if incident involved a moving vehicle | Workflow Status: Started

Incident Number: NEW | *Incident Date: 10/14/2016 | *Incident Hour: | *Min: |

*Injured Employee Ref#: | Injured Employee's Name: | Title: |

Appointment Date: | Age Years: | *Employee's Shift: |

Location where Incident Occurred

Borough: | *Incident Location Exact Street Name(s): |

Injured Employee's Payroll Location

Borough: | District: | Section: |

Work Location On Day of Incident

Same as Payroll Location | [Click here to view all Units and Locations hierarchy](#)

Borough/Unit: | District/Location: | Section: |

Payroll Supervisor Information

*Payroll Supervisor Ref#: | Payroll Supervisor Name: | *Phone: () - |

Borough: | District: |

How was injured employee transported to the Hospital?

Type of Transport: | If ambulance, what was the number? |

Name of EMT: | EMT Badge Number: |

Hospital Information

Hospital: | Hospital's Address: |

Attending Physician's Name: | Hospital Phone: () - | Extension: |

Injured Employee Information

*Type of Work Assigned: |

Injured Part of Body | Find | First | 1 of 1 | Last

Injured part of Body: |

Nature of Injury | Find | First | 1 of 1 | Last

Nature of Injury: |

Nature of Injury | Find | First | 1 of 1 | Last

Nature of Injury: |

Incident Type | Find | First | 1 of 1 | Last

Type of Incident: |

Unsafe Act | Find | First | 1 of 1 | Last

Type Of Unsafe Act: |

Unsafe Condition | Find | First | 1 of 1 | Last

Type Of Unsafe Condition: |

Did injured employee continue to work? | Was the incident witnessed by a Supervisor? |

Was medical care provided immediately? |

Has employee been injured in the past 12 months? |

Did the incident occur while entering/exiting the vehicle? | Was employee coming off of a night shift? |

Was employee driving from right side of vehicle? | Was employee working "out of town"? |

Was employee wearing protective vest? | Was employee wearing uniform shorts? |

Was employee wearing protective gloves? | Was employee wearing long sleeves? |

Was employee wearing protective footwear? | Did incident occur during performance of duty? |

Was incident investigated by Safety Division? |

If incident resulted from unsafe condition, what corrective action was taken? |

250 characters remaining

If incident resulted from unsafe action, what discussion took place with employee? |

250 characters remaining

Investigating Officer Information

Same as Payroll Supervisor

Officer's Reference Number: | Investigating Officer's Name: |

Borough: | District: | Section: |

Save | Previous tab | Next tab



Favorites Main Menu > Workforce Monitoring > Health and Safety > DS 807 LODI

Investigating Supervisor Injured Employee & Witnesses Superintendent & BOS Attachments Medical Billing

Incident Number: 1516533-07112016

Workflow Status: Pending BOS Review

LODI-Help

Return to Search

Section 4 - Supt

Superintendent's comments:

Characters remaining 250

Text input area for Superintendent's comments

By initialing, I certify that the online DS 807 to my knowledge is now complete and the uploaded form has the required signatures and is ready for BOS review.

By initialing, I have reviewed the DS 807 and uploaded forms and have determined they need to be revised or completed.

Superintendent's Reference Number: 0014134

Superintendent's Name: Lazare, Peter F

Date: 07/14/2016

Borough: MNBO

District: MN02

Section:

Borough Operations Superintendent page - initials entered for approval

Section 5 - Borough Operations Superintendent

By initialing, I certify that the online DS 807 to my knowledge is now complete and the uploaded form has the required signatures and is ready for Medical's review.

By initialing, I have reviewed the DS 807 and uploaded forms and have determined they need to be revised or completed.

BOS Reference Number:

BOS Name:

Date:

Generate PDF to Print

Generate PDF

Save Previous tab Next tab

Investigating Supervisor | Injured Employee & Witnesses | Superintendent & BOS | Attachments | Medical Billing

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APPENDIX "C"

DETACH THIS COVER SHEET BEFORE STARTING TO WRITE

Underline the proper descriptive statement and its corresponding code number, where applicable, for each of the categories below. After the numbers are entered in the proper place on the form, the immediate supervisor on duty at the time of injury must complete a written statement explaining the incident, using these categories:

INJURED PART OF BODY

U1 FINGER L1 TOE H1 HEAD
 U2 HAND L2 FOOT H2 FACE
 U3 WRIST L3 ANKL H3 EYE
 U4 ARM L4 LEG H4 EAR
 U5 ELBOW L5 KNEE H5 NOSE
 H6 MOUTH
 H7 TEETH

INJURED SIDE(S) OF BODY

T1 NECK 11 GROIN
 T2 SHOULDER 12 LUNGS
 T3 RIB 0D OTHER
 T4 BACK
 T5 CHEST
 T6 HIP

LEFT
 RIGHT
 BOTH

NATURE OF INJURY

N 1 AMPUTATION N 8 DISLOCATION N 15 SCRATCHES (Superficial Wounds N 0 OTHER
 N 2 ASPHYXIA N 9 ELECTRIC SHOCK N 16 SPRAINS, STRAINS
 N 3 BURN OR SCALD N 10 FRACTURE N 17 MULTIPLE INJURIES
 N 4 CONCUSSION N 11 FOREIGN BODY N 18 HEATING LOSS
 N 5 CONTUSION, CRUSHING, BR N 12 HEAT STROKE N 19 VISION LOSS
 N 6 CUT, LACERATION N 13 HERNIA N 20 INHALATION OF FUMES
 N 7 DERMATITIS N 14 INFECTION N 21 PUNCTURE, NEEDLESTICKS

INCIDENT TYPE

AT 1 STRUCK AGAINST STATIONARY TRUCK AT 9 BODILY REACTION FROM VOLUNTARY MOTION
 AT 2 STRUCK AGAINST MOVING OBJECT AT 10 OVER EXERTION
 AT 3 STRUCK BY FALLING OBJECT AT 12 CONTACT WITH NOXIOUS FUMES
 AT 4 STRUCK BY FLYING OBJECT AT 13 VEHICLE ACCIDENT OVER EXERTION
 AT 5 FALL FROM ELEVATION AT 14 ANIMAL, INSECT BITE
 AT 6 FALL ON SAME LEVEL AT 15 ASSAULT
 AT 7 CAUGHT IN, UNDER OR BETWEEN AT 16 LIQUID, SLIPPERY SUBSTANCE
 AT 8 RUBBED OR ABRADED AT 0 OTHER (Specify type of incident)

UNSAFE ACT

A 1 OPERATING WITHOUT AUTHORITY
 A 2 OPERATING WITHOUT OR WORKING AT UNSAFE SPEED (too fast, too slow, unsafe short cuts)
 A 3 MAKING SAFETY DEVICES INOPERATIVE (bypassing, disconnecting, misadjusting, etc.)
 A 4 USING UNSAFE EQUIPMENT OR USING EQUIPMENT UNSAFELY
 A 5 UNSAFE LOADING, PLACING MIXING, COMBINING
 A 6 TAKING UNSAFE POSITION OR POSTURE (improper lifting, twisting body, in right of way or line of travel, etc.)
 A 7 WORKING ON MOVING OR DANGEROUS EQUIPMENT UNNECESSARILY (oiling, cleaning, adjusting, etc.)
 A 8 HORSEPLAY (teasing, fooling, practical joking, quarreling, distracting, etc.)
 A 9 FAILURE TO WEAR PERSONAL PROTECTIVE DEVICES (such as goggles, gloves, safety shoes, respirators, etc.)
 A 10 OTHER UNSAFE ACT (Specify in additional remarks section of the form)
 A 11 N/A

UNSAFE CONDITION

C 1 INADEQUATELY GUARDED (flimsy, loose, improper, insufficient, incomplete, etc.)
 C 2 UNGUARDED (platforms, catwalks, points of operation, power transmission apparatus, etc.)
 C 3 DEFECTIVE TOOLS, EQUIPMENT, SUBSTANCE (worn, torn, cracked, broken, rusty, bent, etc.)
 C 4 UNSAFE DESIGN OR CONSTRUCTION (in the blueprint, plan engineering or fabrication)
 C 5 HAZARDOUS ARRANGEMENT (poor layout of machines, aisles, exits, congestion or housekeeping)
 C 6 UNSAFE ILLUMINATION (lighting too weak, too strong, glare type, direction, color, etc.)
 C 7 UNSAFE VENTILATION (concentrations of toxic fumes, vapors, dusts, etc.)
 C 8 UNSAFE CLOTHING (for the job being done, inadequate, unsuited, ill fitting, etc.)
 C 9 UNSAFE FOOTING OR CONDITION (due to grease, ice, water, debris, obstacle, pothole etc.)
 C 10 OTHER (Specify in additional remarks section of the form)
 C 11 N/A

SHIFT

2200-0600	0200-1000	0600-1400	1000-1800	1400-2200	1800-0200	Other (Specify Shift)
2300-0700	0300-1100	0700-1500	1100-1900	1500-2300	1900-0300	
0000-0800	0400-1200	0800-1600	1200-2000	1600-0000	2000-0400	
0100-0900	0500-1300	0900-1700	1300-2100	1700-0100	2100-0500	

TYPE OF WORK ASSIGNED

Collection	Mechanical Broom	Wrecker	CFC	School Truck	Snow Melter
Recycling	Plowing	Guide man	Baskets	FEL	Bulk Truck Collection
Relays	Spreading	Roll On/ Roll Off	Transport	Salt Receiving	Other (Specify work)
MLP/Cleaning	Garage Utility	EZ Pack	Security	Salt Loading	

<input type="checkbox"/> Investigating Supervisor : Check here if incident involved a moving vehicle	EMPLOYEE'S REFERENCE NUMBER								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; height: 20px;"></td> </tr> </table>								

Caution to supervisors, injured employees and witnesses:
Disciplinary Code Rule 6: Making false reports or entries in or on any Department or other official record or in connection with any Departmental operation or activity will result in disciplinary action.

INSTRUCTIONS:

1. This report must be received by the Medical Division within 48 hours of the incident.
2. The copy of this report must be printed/detached and given to the injured employee immediately upon completion of Sections 1, 2 & 3.
3. Injured employee must submit this form and the DS807B to the HCF Sign-in window within 24 hours.

SECTION 1 - To be completed by the Investigating Supervisor	DATE OF INJURY	TIME OF INJURY	AGE	LOCATION WHERE INCIDENT OCCURRED	BOROUGH	EXACT STREET NAME(S)		
	INJURED EMPLOYEE'S (Last, First, Mi.)			WORK LOCATION ON DAY OF INCIDENT	BOROUGH	DISTRICT	SECTION	
	TITLE	APPOINTMENT DATE	INJURED EMPLOYEE'S PAYROLL LOCATION		BOROUGH	DISTRICT	SECTION	
	PAYROLL SUPERVISOR'S NAME			SUP. REF. NUM.	BOROUGH	DISTRICT	SUPERVISOR PHONE	
	EMPLOYEE'S SHIFT	TYPE OF TRANSPORT	IF AMBULANCE, WHAT WAS THE NUMBER?		NAME OF EMT		EMT BADGE NUMBER	
	NAME OF HOSPITAL	HOSPITAL'S ADDRESS			ATTENDING PHYSICIAN'S NAME		HOSPITAL PHONE	
	TYPE OF WORK ASSIGNED			INJURED SIDE(S)	INJURED PART OF BODY			
	NATURE OF INJURY	TYPE OF INCIDENT	TYPE OF UNSAFE ACT		TYPE OF UNSAFE CONDITION			
	Additional remarks on any information not covered above; be specific							
	DID INJURED EMPLOYEE CONTINUE TO WORK?				WAS MEDICAL CARE PROVIDED IMMEDIATELY? If 'No' give Date:			
	DID INCIDENT OCCUR DURING PERFORMANCE OF DUTY?				WAS INCIDENT INVESTIGATED BY SAFETY DIVISION? If 'yes' give Date: Time:			
	HAS EMPLOYEE BEEN INJURED IN THE PAST 12 MONTHS?				IF YES, IS THIS THE SAME INJURY TYPE?			
	WAS EMPLOYEE COMING OFF OF A NIGHT SHIFT?				WAS EMPLOYEE WEARING LONG SLEEVES?			
	WAS THE INCIDENT WITNESSED BY A SUPERVISOR?				WAS EMPLOYEE WEARING PROTECTIVE VEST?			
	WAS EMPLOYEE WORKING 'OUT OF TOWN'?				WAS EMPLOYEE WEARING UNIFORM SHORTS?			
DID THE INCIDENT OCCUR WHILE ENTERING/EXITING THE VEHICLE?				WAS EMPLOYEE WEARING PROTECTIVE GLOVES?				
WAS EMPLOYEE DRIVING FROM RIGHT SIDE OF VEHICLE?				WAS EMPLOYEE WEARING PROTECTIVE FOOTWEAR?				
If incident resulted from unsafe condition, what corrective action was taken?								
If incident resulted from unsafe action, what discussion took place with employee?								
INVESTIGATING OFFICER			BOROUGH	DISTRICT	SECTION	INVESTIGATING OFFICER'S SIGNATURE	DATE	
INVESTIGATING OFFICER'S REF. NUM.								
SECTION 2 - Injured Employee	Injured employee's own description of the incident, including part of body affected, and circumstances surrounding the incident							
	How could the injury have been prevented?							
	HAVE YOU BEEN INJURED IN THE PAST?			NUMBER OF TIMES INJURED		INJURED EMPLOYEE'S SIGNATURE		DATE
SECTION 3 - Witnesses	Statement of 1 st eyewitness							
	1 st EYEWITNESS NAME			ADDRESS		1 st EYEWITNESS SIGNATURE		DATE
	Statement of 2 nd eyewitness							
	2 nd EYEWITNESS NAME			ADDRESS		2 nd EYEWITNESS SIGNATURE		DATE
SECTION 4 - Supt.	District Superintendent's comments							
	SUPERINTENDENT NAME			SUPT. REF. NUM.		BOROUGH	DISTRICT	DATE
	<input type="checkbox"/> By initialing, I certify that the online DS 807 to my knowledge is now complete and the uploaded form has the required signatures and is ready for BOS review.							
SECTION 5 - BOS	BOROUGH OPERATIONS SUPT. NAME			BOS. REF. NUM.		DATE		
	<input type="checkbox"/> By initialing, I certify that the online DS 807 to my knowledge is now complete and the uploaded form has the required signatures and is ready for Medical's review.							



**THE CITY OF NEW YORK
DEPARTMENT OF SANITATION
GENERAL ORDER 2017-06**

EFFECTIVE DATE: May 21, 2017

SUBJECT: **EMPLOYEES REPORTING SICK, L.O.D.I. or
WORKERS COMPENSATION**

AFFECTED DIRECTIVES: General Order 86-09 and Operations Order 09-05

REFERENCE: Policy and Administrative Procedure 2007-04

Responsibility:

All locations with assigned or permanently attached uniformed personnel will utilize the S.M.A.R.T. system and the Telephone Order Book to update an employee's status to sick, or L.O.D.I. Uniformed titles include Sanitation Workers, Sanitation Supervisors, and General Superintendent's Level I-V.

All locations with non-uniformed personnel covered under P.A.P. 2007-04 (personnel in trade titles assigned to S.W.M., B.M.E., B.B.M. and other non-uniformed personnel) will continue to utilize the SCAN system and maintain a Medical Leave Log (DS 1367- appendix A) in accordance with this order as a permanent record of employees reporting sick, L.O.D.I. or Workers Compensation.

The District Superintendent or Location Supervisor will be responsible for ensuring that all entries are made in S.M.A.R.T and the Telephone Order Book, in accordance with this order:

Responsibility of the District Superintendent or Location Supervisor:

The supervisory personnel receiving the telephone call or notification from an employee reporting sick, L.O.D.I. or workers compensation shall locate the employee within the S.M.A.R.T. system and follow the procedures outlined below:

Note: Entering required information only into the location telephone order book is considered incomplete.

- Open the "Add Unavailable" menu for the affected employee, select SICK or LODI as the unavailable code.
- Select the appropriate "Date going sick for" or "Date of LODI".
 - This is the date the employee is reporting sick for, not necessarily the date the employee is calling in.
 - You may enter a future date (not exceeding 5 days into the future).
 - You may enter any date in the past.

- If the employee is going sick on shift, the “On shift sick?” check box must be selected and the appropriate time entered for the “Sick as of” field.
- If the employee is reporting L.O.D.I., the “LODI Time” must be entered.

Supervisory personnel that receive the telephone call or notification from an employee reporting sick **must** ask the affected employee the address from where they are reporting sick, the appropriate telephone contact number, as well as the employee’s assigned chart number. Supervisory personnel entering an employee L.O.D.I. or Workers Compensation into the system **MUST USE THE EMPLOYEES HOME ADDRESS. TEMPORARY ADDRESSES CANNOT BE USED WHEN CLAIMING L.O.D.I. OR WORKERS COMPENSATION.**

Supervisory personnel that receive the telephone call or notification must then validate the given address, contact phone number, and chart number against the information displayed in the “SCAN Medical/Address Information” box in the “Add Unavailable” menu prior to submitting the Medical Leave entry.

- If the address information the employee is reporting to the supervisory personnel matches the information displayed in the “SCAN Medical/Address Information” box, then the “ML Address” shall be set to “Home”.
- If any part of the address or phone number the employee is reporting does NOT match the information displayed in the “SCAN Medical/Address Information” box, then the “ML Address” must be set to “Temporary” and all pertinent information must be entered:
 - Number & Street
 - Apartment - If applicable, indicate which floor of a private house, or apartment number
 - City
 - State
 - Note: Select “OT” if employee is reporting sick from outside of the country. All other fields will still be required.
 - Zip Code
 - Home Phone - Phone number where employee may be reached while at temporary address
 - Residence District - *If an employee calls out sick from outside of the 5 boroughs then “Other” must be selected*
 - Residence zone - Medical Zone of the temporary address. To find the zone, click on the “I” icon for a list of Medical zones. *If employee requests sick leave from outside of the country or any area that is not covered by the established Medical Zones then Medical Zone 12 must be entered*

The supervisory personnel entering the information into the S.M.A.R.T. system must be aware that they may be called upon to testify, if required, whether the address listed on the Medical leave record came from the words of the employee calling in sick, or reporting L.O.D.I./workers compensation and that they entered the information properly into the S.M.A.R.T. system.

Medical Leave Details

Supervisory personnel that receive the telephone call or notification from an employee reporting sick, L.O.D.I. or Worker’s Compensation shall enter all required fields relating to the medical leave incident as follows:

- Symptoms- The nature of the illness or injury
- Chart Number: The chart number that the employee is currently assigned. This must be validated with the employee reporting the Medical Leave Incident as the time of notification.

- Ordered to Health Care Facility- Select Yes or No
- Going to the hospital- Select Yes or No
 - *If admitted to the Hospital, do not use Hospital address, only use permanent address on file.
- Shift Preference: The shift preference the employee signed for. (For example, a night signee would be shift 1 or 3, all non-night signees are shift 2)
 - Note: This is NOT the shift the employee was scheduled to work.
- ML Address – Home or Temporary as outlined above.
 - *Temporary address MUST NOT be entered when reporting L.O.D.I. or compensation.
- Trials- Select Date if applicable
- Entered By- The personnel entering the Medical Leave Incident into the S.M.A.R.T. System will enter their Title followed by their First initial, and last name. (i.e. - Supv. J. Smith)

For all locations with assigned or permanently attached uniformed personnel, S.M.A.R.T. will be the primary source for verifying any details about a Medical Leave Incident, including the address, especially in cases where an employee may be subject to disciplinary action.

Medical Leave Log (DS 1367)

The Medical Leave Log (DS 1367) will no longer need to be updated for each instance of Sick or LODI when the incident is entered into the S.M.A.R.T. system.

The Medical Leave Log (DS 1367) shall remain on location and be accessible at all times. The Log (DS 1367) shall be utilized in the following scenarios.

1. During a Sunday, Holiday, etc. the log shall be used by security personnel on shift who are not authorized to access the S.M.A.R.T. system.
 - a. All security personal must receive instructions on properly logging medical leave calls in the Medical Leave Log (DS 1367)
 - b. Upon arrival of a Supervisor to the location, all information recorded in the log by the onsite security personnel shall be entered into the S.M.A.R.T. system.
2. During an outage of any kind (power, network etc.) where the S.M.A.R.T. system is not available, the log shall be used by personnel on shift to record all medical leave incidences during the outage.
 - a. Once the outage has concluded, the location supervisor shall enter any medical leave incidences that were recorded in the log during the outage, into the S.M.A.R.T. system.
3. When entering an incident for an employee who is NOT in the S.M.A.R.T. system. (Non-uniformed personnel who are covered under P.A.P. 2007-04 (personnel in trade titles assigned to S.W.M., B.M.E., B.B.M., and other non-uniformed personnel)).

During all other times, the use of the Medical Leave Log (DS 1367) is not required.

When the log (DS 1367) is to be used, the following procedures must be followed:

- The Log will be maintained on a 24-hour basis commencing at 2400 hours with a double line drawn across the book to separate each day. The 1600-2400 hour shift supervisor will initial the line. Do not use a new page for each day.
- All entries will be printed in ink. Any errors will be lined out and initialed. No erasures or eradication permitted.

Columnar Instructions

- A. Date employee is reporting Sick, LODI, or Worker's Compensation
- B. Time call is received
- C. Full name of employee (Do not use initials)
- D. Reference number of employee (Do not use Social Security No.)
- E. Title of employee
- F. Badge number of employee
- G. Chart number of employee
- H. Address at which employee is reporting Sick, LODI, or Worker's Compensation
- I. Home address on record or other address (check one)
 - a. Note: The employee that receives the telephone call or notification from an employee reporting sick, L.O.D.I., or Worker's Compensation must be aware of the importance of asking the employee the address from which they are reporting sick, even if it is their current permanent address. The information received must be entered in the Medical Leave Log (DS 1367) immediately.

NOTE - only the permanent address can be entered when an employee reports L.O.D.I. or Worker's Compensation

- J. Medical Zone of the address
- K. Telephone number of employee
- L. Nature of illness
- M. Name of person receiving the call (no initials)
- N. Date information is entered in SCAN
- O. Name of person who entered information in SCAN
- P. Work location designation
- Q. Page number - Upon receipt of a Medical Leave Log book the location supervisor will ensure that all page numbers are entered immediately

If an employee has scheduled vacation, is suspended, or otherwise requests any other type of leave, a DS 100 must be submitted through proper channels to the DSNY Health Care Facility (H.C.F.) Supervisors office. At that point the H.C.F. Supervisor will place the employee on leave status. It is the responsibility of the employee's location Supervisor, DSOA, or designee to place the employee back on Medical Leave on the operational day immediately preceding the end of leave status, with an effective date of the first day the employee will be back on medical leave--i.e., if the employee is due to be back sick on Tuesday, the employee's location Supervisor, DSOA, or designee should reenter the Medical Leave incident Monday. The work location must enter the same address used by the employee when he/she initially began Medical Leave. *If a temporary address was used to enter the sick incident then it must be used again when placing the employee back out sick.*

Health Care Facility Resumptions

When the healthcare facility resumes an employee to regular duty, or medical duty assignment, the following procedures will be followed:

1. Location personnel will check the SCAN resumption screen (12) to verify that the health care facility has granted a resumption to the affected personnel
2. Location personnel will locate the ACTIVE medical leave record within the personnel details window for the affected personnel in S.M.A.R.T.
 - a. The ACTIVE medical leave record will be located in the unavailable history table.
3. Location personnel will EDIT the medical leave record and add the end date/time for the selected incident.

- a. The proper end date/time will be the last time the affected personnel is due to be on medical leave--i.e., if John Smith is sick, and is resuming to work for Wednesday, the end date will be set for Tuesday at 23:59, such that as of Wednesday at 00:00, the employee is available for regular duty.
4. Location personnel will **NOT DELETE** a medical leave incident in S.M.A.R.T. in order to resume an employee.

NOTE: If an error is found in the Sick or L.O.D.I. record, notify the Health Care Facility to make necessary corrections in SCAN. After corrections are made, the user may update or delete the record in S.M.A.R.T.

The District Superintendent or location supervisor will be held strictly accountable for enforcing provisions of this order.

CANCELLATION:

This Order shall remain in effect until it is cancelled.

ISSUING AUTHORITY:



Kathryn Garcia
Commissioner

DISTRIBUTION:

All Management Personnel.

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Supervisor's /Agency - "REPORT OF INJURY"

FISA FORM WCS- 100 (4/09)

CONTINUED ON REVERSE SIDE

CLAIM NUMBER

--	--	--	--	--	--	--	--	--	--

INJURED EMPLOYEE NAME

EMPLOYEE ID

FIRST NAME		M.I.	LAST NAME		EMPLOYEE ID			

EMPLOYEE'S ADDRESS

STREET LOCATION	APT #, FL. #, BOX #
BORO, CITY OR TOWN	STATE
	ZIP

DATE OF ACCIDENT / INJURY MONTH DAY YEAR	TIME OF ACCIDENT HOUR MINUTE AM PM	WAS EMPLOYEE ABSENT DUE TO WORK? <input type="checkbox"/> YES <input type="checkbox"/> NO	INITIAL ABSENCE MONTH DAY YEAR	INITIAL ABSENCE TIME HOUR MINUTE AM PM
---	---------------------------------------	--	-----------------------------------	---

TIME EMPLOYEE BEGAN WORK HOUR MINUTE AM PM	IS EMPLOYEE EXPECTED TO RETURN TO WORK? <input type="checkbox"/> YES <input type="checkbox"/> NO	INJURED WORKER'S WORK WEEK SUN MON TUE WED THU FRI SAT (ENTER AN "X" FOR DAYS USUALLY WORKED)	HAS EMPLOYEE RETURNED TO WORK? <input type="checkbox"/> YES <input type="checkbox"/> NO	RETURN TO WORK DATE MONTH DAY YEAR
---	---	---	--	---------------------------------------

WAS EMPLOYEE PAID FOR A FULL DAY ON THE DAY OF INJURY/ILLNESS? YES NO

HAS THE EMPLOYEE GIVEN YOU NOTICE OF INJURY/ILLNESS? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, NOTICE WAS GIVEN TO: _____ <input type="checkbox"/> ORALLY <input type="checkbox"/> IN WRITING	DATE NOTICE PROVIDED MONTH DAY YEAR
--	---	--

SUPERVISOR'S FIRST NAME		M.I.	LAST NAME	
TITLE		(AREA CD)	WORK TELEPHONE #	EXTENSION

WAS ACCIDENT ON EMPLOYER'S PREMISE? <input type="checkbox"/> YES <input type="checkbox"/> NO	DID ACCIDENT OCCUR DURING WORK HOURS? <input type="checkbox"/> YES <input type="checkbox"/> NO	DID ACCIDENT OCCUR DURING LUNCH BREAK? <input type="checkbox"/> YES <input type="checkbox"/> NO	WAS EMPLOYEE TRAVELING TO/FROM WORK ? <input type="checkbox"/> YES <input type="checkbox"/> NO	WAS EMPLOYEE TRAVELING BETWEEN WORK SITES? <input type="checkbox"/> YES <input type="checkbox"/> NO
---	---	--	---	--

DID ACCIDENT OCCUR AT NORMAL WORK SITE LOCATION? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF NO, EXACT LOCATION AND COUNTY OF ACCIDENT REQUIRED _____ IF ACCIDENT DID NOT OCCUR AT NORMAL WORK SITE, AN EXPLANATION OF WHY EMPLOYEE WAS AT ACCIDENT SITE IS REQUIRED _____
--	---

WAS EMPLOYEE ON SPECIAL OR WORK RELATED FIELD ASSIGNMENTS? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DESCRIBE FIELD ASSIGNMENT _____ <input type="checkbox"/> CONTINUATION #1 ATTACHED
--	--

WAS INJURY WITNESSED BY SUPERVISOR? YES NO INJURY DESCRIPTION AS WITNESSED BY SUPERVISOR OR AS REPORTED MUST BE PROVIDED BELOW

	<input type="checkbox"/> CONTINUATION #2 ATTACHED
--	---

DID EMPLOYEE FOLLOW STANDARDS PROCEDURES AT TIME OF ACCIDENT? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF NO, DETAILS REQUIRED _____ <input type="checkbox"/> CONTINUATION #3 ATTACHED
---	--

DID EMPLOYEE'S ACTION OR BEHAVIOR CONTRIBUTE TO THE ACCIDENT? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DETAILS REQUIRED _____ <input type="checkbox"/> CONTINUATION #4 ATTACHED
---	---

ARE DISCIPLINARY ACTIONS PENDING OR CONSIDERED AGAINST EMPLOYEE? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DETAILS REQUIRED _____ <input type="checkbox"/> CONTINUATION #5 ATTACHED
--	---

DOES THE AGENCY RECOMMEND TO CONTROVERT? <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DETAILS REQUIRED _____ <input type="checkbox"/> CONTINUATION #6 ATTACHED
--	---

WHAT WAS THE DATE OF THE EMPLOYEE'S FIRST TREATMENT? MONTH DAY YEAR	WHERE DID THE EMPLOYEE RELIEVE FIRST MEDICAL TREATMENT FOR THIS INJURY/ILLNESS? <input type="checkbox"/> ON SITE <input type="checkbox"/> DOCTOR'S OFFICE <input type="checkbox"/> EMERGENCY ROOM <input type="checkbox"/> CLINIC/ HOSPITAL/ URGENT CARE <input type="checkbox"/> HOSPITAL STAY OVER 24 HOURS <input type="checkbox"/> UNKNOWN
<input type="checkbox"/> NONE RECEIVED <input type="checkbox"/> UNKNOWN	WHO TREATED THE EMPLOYEE AND WHERE? _____

IS THE EMPLOYEE STILL BEING TREATED FOR THIS INJURY/ILLNESS? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	IF YES, PLEASE ENTER THE NAME AND ADDRESS OF TREATING DOCTOR(S) IN THE DOCTOR SECTION BELOW.
--	--

TO YOUR KNOWLEDGE, DID THE EMPLOYEE HAVE ANOTHER WORK-RELATED INJURY TO THE SAME BODY PART OR A SIMILAR ILLNESS WHILE WORKING FOR YOU? YES NO
IF YES, NAME THE DOCTOR(S) WHO TREATED THE PREVIOUS INJURIES/ILLNESS (IF KNOWN): _____

DOCTOR	NAME FIRST	M.I.	LAST
	ADDRESS STREET LOCATION		
	BORO, CITY OR TOWN	STATE	ZIP PLUS 4

DOCTOR	NAME FIRST	M.I.	LAST
	ADDRESS STREET LOCATION		
	BORO, CITY OR TOWN	STATE	ZIP PLUS 4

ADDITIONAL INFORMATION:

WAS AN OBJECT (E.G. HAMMER, ACID) INVOLVED IN THE INJURY/ILLNESS? YES NO

IF YES, WHAT WAS IT? _____

INJURY DESCRIPTION (SEE CODE TABLE FOR DETAILED INJURY, CAUSE & BODY PART DESCRIPTION CODE BREAKDOWN)

NATURE OF INJURY	INJURY TYPE		INJURY CODE	DESCRIPTION
	<input type="checkbox"/> SI SPECIFIC INJURY	<input type="checkbox"/> OD OCCUPATIONAL DISEASE		

CONTINUATION #8 ATTACHED

CAUSE OF ACCIDENT CAUSE CODE: CAUSE TYPE (CHECK ONE): EXPOSURE (EX) FALL/SLIP (FS) STRIKING AGAINST/STEP ON (SA) CAUGHT BETWEEN (CB) MOTOR VEHICLE (MV) STRUCK/INJURED (SK) CUT/PUNCTURE (CP) STRAINED/INJURED (SN) MISCELLANEOUS CAUSE (MS)

DESCRIPTION: _____

CONTINUATION #9 ATTACHED

BODY PART(S) AFFECTED (INDICATE INJURED BODY PART CODE, DESCRIPTION AND SIDE(S) AFFECTED, IF APPLICABLE)

	BODY SECTION CODES		BODY SECTION: <input type="checkbox"/> LEFT <input type="checkbox"/> RIGHT <input type="checkbox"/> BOTH PART CODE: <input type="checkbox"/>	BODY SECTION: <input type="checkbox"/> LEFT <input type="checkbox"/> RIGHT <input type="checkbox"/> BOTH PART CODE: <input type="checkbox"/>	BODY SECTION: <input type="checkbox"/> LEFT <input type="checkbox"/> RIGHT <input type="checkbox"/> BOTH PART CODE: <input type="checkbox"/>	
	HN (HEAD/NECK)	UE (UPPER)	TR (TRUNK)	LE (LOWER)		

EMPLOYEE'S JOB DESCRIPTION

JOB TASK AT TIME OF INJURY FUNCTIONAL TITLE & DESCRIPTION (ATTACH JOB DESCRIPTION IF AVAILABLE): _____

EMPLOYEE'S JOB WAS (CHECK ONE): FULL TIME PART TIME (8 HR. MAX.)

TYPICAL WORKDAY	SITTING		STANDING		WALKING	
	HOUR	MINUTE	HOUR	MINUTE	HOUR	MINUTE
	<input type="checkbox"/>					

TYPICAL WORKDAY TASKS INDICATE WORKDAY ACTIVITY %	ACTIVITY	0% (N/A)	10% (MINIMAL)	20% (OCCASIONAL)	35% (MODERATE)	50% (FREQUENT)	70-100% (CONTINUOUS)
	BENDING / SQUATTING	A	B	C	D	E	F
	CLIMBING	A	B	C	D	E	F
	KNEELING	A	B	C	D	E	F
	LIFTING * Complete Lifting Detail Section	A	B	C	D	E	F
	REACHING ABOVE SHOULDER	A	B	C	D	E	F
	PUSH / PULL	A	B	C	D	E	F

* LIFTING DETAILS	LIFTING	0% (N/A)	10% (MINIMAL)	20% (OCCASIONAL)	35% (MODERATE)	50% (FREQUENT)	70-100% (CONTINUOUS)
	UP TO 10 POUNDS	A	B	C	D	E	F
	11 TO 20 POUNDS	A	B	C	D	E	F
	21 TO 30 POUNDS	A	B	C	D	E	F
	31 TO 50 POUNDS	A	B	C	D	E	F
	OVER 50 POUNDS	A	B	C	D	E	F
	INDICATE THE PERCENTAGE OF WEIGHT LIFTED PER CATEGORY DURING A TYPICAL WORKDAY						

IS KEYBOARD USED? YES NO IF YES, HOW MANY HRS PER WEEK?

ARE HANDS USED FOR NON KEYBOARD REPETITIVE MOTION? YES NO IF YES, EXPLAIN WHAT OTHER REPETITIVE MOTIONS ARE PERFORMED? _____

IS CLAIMANT A SEASONAL EMPLOYEE? YES NO

DID ACCIDENT INVOLVE A MOTOR VEHICLE? YES NO IF YES, WAS VEHICLE REGISTERED TO THE CITY OF NEW YORK? YES NO USE OF CITY VEHICLE AUTHORIZED? YES NO EMPLOYEE STRUCK BY CITY VEHICLE? YES NO EMPLOYEE DRIVING A CITY VEHICLE? YES NO

WAS INJURED ON PUBLIC TRANSPORTATION? YES NO IF YES, EXPLAIN _____ DOES EMPLOYEE OWN THE VEHICLE? YES NO WAS EMPLOYEE A VEHICLE PASSENGER? YES NO

DID EMPLOYEE DIE FROM INJURY? YES NO IF YES, ANSWER THE FOLLOWING QUESTIONS

DATE EMPLOYEE DIED: MONTH DAY YEAR TIME EMPLOYEE DIED: HOUR MINUTE AM PM

NAME OF NEAREST RELATIVE: FIRST M.I. LAST NAME

RELATIONSHIP HOME TELEPHONE #

ADDRESS: STREET LOCATION (INCLUDE APT / FL. #)

BORO, CITY OR TOWN STATE ZIP PLUS 4

IDENTIFY PERTINENT DOCUMENTATION (e.g. Police Report, Safety Reports, etc.) _____

CONTINUATION #10 ATTACHED

WAS INJURY CAUSED BY ASSAULT ON THE JOB? YES NO IF YES, PROVIDE INFORMATION BELOW

ASSAILANT WAS: CO-WORKER FRIENDS, FAMILY OR ACQUAINTANCE CLIENT OTHER _____ OFFENDER OWNER / OPERATOR OUTSIDE CONTRACTOR

ASSAULTED BY

NAME OF ASSAILANT: FIRST M.I. LAST NAME

ADDRESS: STREET LOCATION (INCLUDE APT / FL. #)

BORO, CITY OR TOWN STATE ZIP PLUS 4

HOME TELEPHONE # EXTENSION

CAN YOU PROVIDE DETAILED EVENTS PRECEDING ASSAULT? YES NO IF YES, EXPLAIN _____

CONTINUATION #11 ATTACHED

DID ASSAULT INVOLVE A PERSONAL MATTER? YES NO IF YES, EXPLAIN _____

CONTINUATION #12 ATTACHED

DID ASSAULT INVOLVE WORK MATTER? YES NO IF YES, EXPLAIN _____

CONTINUATION #13 ATTACHED

DID THE EMPLOYEE START PROVOKE OR PROLONG THE ASSAULT IN ANY WAY? YES NO IF YES, EXPLAIN _____

CONTINUATION #14 ATTACHED

PREPARED BY (Please Print) _____ TITLE _____

SIGNATURE _____ TEL # _____ DATE _____

**THE CITY OF NEW YORK
WORKERS' COMPENSATION CLAIM INITIATION
EMPLOYEE STATEMENT**

FISA FORM WCS-110 (1/01)

CLAIM NUMBER									

INJURED EMPLOYEE NAME				EMPLOYEE ID				
FIRST NAME		M.I.	LAST NAME					
EMPLOYEE'S ADDRESS		STREET LOCATION		APT #, FL.#, BOX #				
		BORO, CITY OR TOWN		STATE		ZIP		

DATE OF ACCIDENT / INJURY			TIME OF ACCIDENT			WORK TEL #			EXTENSION		
MM	DD	YYYY	HH	MM	AM <input type="checkbox"/> PM <input type="checkbox"/>	(AREA CD)					
HOME TEL #			DATE OF STATEMENT						# OF WITNESS(ES)		
(AREA CD)			MM	DD	YYYY						

SUPERIOR NOTIFIED						
FIRST NAME		M.I.	LAST NAME		DATE FIRST NOTIFIED	
					MM-DD-YYYY	
TITLE			WORK TEL #			
			(AREA CD)			

DESCRIBE LOCATION WHERE ACCIDENT OCCURRED

CONTINUATION #1 ATTACHED

DESCRIBE FULLY HOW ACCIDENT OCCURRED

CONTINUATION #2 ATTACHED

DESCRIBE OBJECT OR SUBSTANCE THAT CAUSED INJURY

CONTINUATION #3 ATTACHED

DESCRIBE NATURE AND EXTENT OF INJURY (INCLUDING AFFECTED BODY PARTS)

CONTINUATION #4 ATTACHED

NAME <small>(PLEASE PRINT)</small>			TITLE	TEL.#
SIGNATURE			DATE	

THE CITY OF NEW YORK
WORKERS' COMPENSATION CLAIM INITIATION
WITNESS STATEMENT

FISA FORM WCS-120 (8/00)

CLAIM NUMBER

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INJURED EMPLOYEE NAME

EMPLOYEE ID

FIRST NAME	M.I.	LAST NAME	EMPLOYEE ID
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

WITNESS INFORMATION

FIRST NAME	M.I.	LAST NAME	SOCIAL SECURITY NUMBER
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

STREET LOCATION (INCLUDE APT / FL #)

HOME ADDRESS

BORO, CITY OR TOWN **STATE** **ZIP** **PLUS 4**

WORK TEL # (AREA CD)

HOME TEL# (AREA CD)

ARE YOU A CITY EMPLOYEE? YES NO

RELATIONSHIP TO INJURED

DATE OF ACCIDENT / INJURY

MONTH DAY YEAR

TIME OF ACCIDENT

HOUR : MINUTE AM PM

LIST OTHER PERSONS WHO ALSO MIGHT HAVE WITNESSED ACCIDENT

ATTACH NAMES OF ADDITIONAL WITNESSES

CONTINUATION ATTACHED

FIRST NAME	M.I.	LAST NAME
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

DESCRIPTION OF ACCIDENT - INCLUDING LOCATION

CONTINUATION ATTACHED

NAME (PLEASE PRINT)	TITLE	TEL.#
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SIGNATURE	DATE
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STATE OF NEW YORK
WORKER'S COMPENSATION BOARD
EMPLOYER'S REPORT OF INJURED EMPLOYEE'S CHANGE IN EMPLOYMENT STATUS
RESULTING FROM INJURY

This report is to be filed directly with the Chair, Workers' Compensation Board at address shown on reverse side as soon as the employment status of an injured employee, as reported on Form C-2.5, Form C-2, or on a previous Form C-11, is changed. Change in employment status includes return to work, discontinuance of work, increase or decrease of regular hours of work and increase or reduction of wages. Copy should also be sent to your insurance carrier.

ALL COMMUNICATION SHOULD REFER TO THESE NUMBERS				
1. W.C.B. Case Number	2. Carrier Case Number	3. Carrier Code	4. Date of Injury	5. Claimant's Soc. Sec. No.
Name		Address to which notices should be sent (Give Number and Street, City, State and Zip Code)		
6. Injured Person				Apt. No.
7. Employer				
8. Carrier	THE CITY OF NEW YORK		350 Jay Street, Brooklyn, NY 11201-2908	

9. Date of most recent Employer's Report filed: (Check "X" form and give date filed.)
 C-2.5 C-2 C-11
10. Date Disability Began Hour of Day: A.M. P.M.
11. Nature of Injury:
12. Date of FIRST return to work following injury:
13. (a) Change of employment status resulting from above injury:

Employment Status	Hours Per Day	Days Per Week	Earnings	Occupation
Prior To Injury				
Changed To				

- (b) Date of this change in employment status:
- (c) Remarks:

14. Loss of time resulting from above injury since first return to work:

From (Month, Day, Year)	To (Month, Day, Year)	Reason

15. Is injured still under the care of a physician? If so, give name of physician
16. Has injured died? If so, state date of death
- Name and address of nearest relative known

Date of this report Firm Name

Telephone No. Signed by

Official Title

ATTACHMENT 12

SUNKEN VESSEL PROCEDURE

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Solid Waste Management

Sunken Vessel Procedure Rev 5-1-18

A copy of this form is to be used for recording all information

Day:	Date:	Shift:	Time:
Weather Conditions:		Visibility:	
OCO Supervisors Name:		Time Notified:	
59 th Supervisor Name:		Time Notified:	
F.K. Supervisor Name:		Time Notified:	
Visy Name:		Time Notified:	
Tug Company Contact:		Time Notified:	
Name of Tug:		Captain:	
Name of towing Company:			

Barges in Tow

Although it is important to notify the proper authorities, the primary consideration must be to handle the emergency quickly and efficiently. Therefore, it is essential that all steps be taken to preserve life and limb and to safeguard the vessel(s), barge(s) and any other department vessel(s) in order to ensure that all waterborne litter, gas and oil are immediately contained.

The Operations Control Office (OCO) has a critical role in this Procedure. Their role is clearly identified below.

The duties / responsibilities set forth for each person herein are to be expeditiously performed. In the event of the sinking of a Department of Sanitation Vessel, the following procedure is to be implemented and followed. All information set forth below is to be recorded on this form.

1. The first person aware of the incident should contact the Operations Control Office.

	Telephone #	Person Notified	Time Notified	Time of Arrival
O.C.O	646 885 4700 / 4703			

2. The Operations Control Office will notify the Deputy Commissioner Solid Waste Management, Deputy Director Solid Waste Management and his/her designee of the incident.

	Telephone #	Person Notified	Time Notified	Time of Arrival
Deputy Commissioner SWM, J. Atkinson	C# 347 986-8472 W# 646 885-4690			
Director of SWM, J. Capo	C# 917-576-2880 W# 646 885-4693			

*Home phone numbers are listed with O.C.O.

- As soon as the exact location of the vessel is determined, OCO will dispatch a diver to ascertain the damage and to perform remedial repairs to keep the damaged vessel afloat. The diver will also supply marker buoys to identify the unloading areas of the sunken vessel.

Company Name	Telephone #	Person Notified	Time Notified	Time of Arrival
Randive	732 324-1144			

**The name and phone numbers of the firm under contract to provide diving services to the Department is listed with Fresh Kills Headquarters and O.C.C.

- O.C.O. will contact the Company which is the contractor under the annual Contract for the Emergency Deployment of Containment Booms and the Performance of related work upon receipt of notice of a possible sinking. He/she will have the contractor prepare to respond. As soon as the exact location of the sinking vessel is determined, OCO will instruct the contractor to report to the scene and deploy the booms. To ensure an immediate response the contractor must be given the exact location of the barge and travel directions.

Company Name	Telephone #	Person Notified	Time Notified	Time of Arrival
DCAS R/C – Custom Marine Inc.				

***The name and phone number of the firm providing services under the Contract for Emergency Deployment of Containment Booms and the performance of related work is listed with Fresh Kills Headquarters and OCO.

NOTE: The Contractor is required to respond within three (3) hours after notification

OCO will initiate the following actions:

The Operations Support officer will be dispatched to the location to oversee the operation. A Supervisor from Fresh Kills, 59th Street MTS or OCO will also be dispatched to the location. The personnel at the site are to provide up-to-date information to OCO. The OCO Supervisor will curtail or stop normal operations, if necessary, to provide personnel or equipment to assist at the location.

Officer Dispatched	Name	Phone #	Time Notified	Time of Arrival

If the vessel is a sunken Barge the following equipment shall be dispatched by the Operations Control Office:

- a. As many barges as are necessary to encircle or otherwise block-off the sunken barge and to contain litter will be dispatched immediately.

If necessary, OCO will hire an additional tug to assist.

NOTE: If the barge is in 59th slip, it will immediately be moved to an outside staging area and then encircled by other barges or by a containment boom in order to contain the refuse within a confined area.

OCO will then contact the following personnel:

Title	Telephone #	Name of Contact	Time Notified	Time of Arrival
Deputy Commissioner SWM, J. Atkinson	C# 347 986-8472 W# 646 885-4690			
Director of SWM, J. Capo	C# 917-576-2880 W# 646 885-4693			
Director Safety, Chief D. Callery	718 758-7948			
Director Fresh Kills, G. Basciano	W# 718 967-1400 C# 646 235-6672			

*Home phone numbers are listed in OCO.

Deputy Commissioner or Director of SWM will instruct O.C.O. to notify the following Agencies of this incident:

Agency	Telephone #	Name of Contact	Time Notified	Time of Arrival
Coast Guard	718 354-4353/56			
NYPD Harbor Patrol	718 765-4100			

FDNY Fire Boat	718 722-3413			
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OCO will then instruct B.C.C. Operations to contact the following personnel and inform them of the situation:

- a) Commissioner
- b) First Deputy Commissioner
- c) Deputy Commissioner for Legal Affairs
- d) Director of the Bureau of Cleaning and Collection
- e) Assistant Commissioner for Public Affairs
will have the required auxiliary equipment and material such as portable pumps, mooring lines, generators, portable lights and portable radios checked and dispatched / delivered to the location of the incident by the Fresh Kills personnel.

O.C.O will have the required auxiliary equipment and materials such as portable pumps, mooring lines, generators, portable lights and portable radios checked and dispatched/delivered to the location of the incident by Fresh Kills personnel.

Title & Name	Telephone #	Equipment Requested	Time Notified	Time of Arrival

O.C.O. will also have safety equipment including life jackets, hand lines, life ring and flashlights, checked, if necessary, and dispatched / delivered to the location of the incident by Fresh Kills personnel.

Title & Name	Telephone #	Equipment Requested	Time Notified	Time of Arrival

O.C.O. will arrange to have Fresh Kills deliver fuel to the location of the incident for all equipment.

	Telephone #	Person Notified	Time Notified	Time of Arrival
BCC Operations Desk	646 885-5051			

NOTE: Prior to dispatching any motorized equipment to the location of the incident, all Marine and Surface Equipment must be checked to ensure that the equipment's operating condition is acceptable, and that fuel, lubricants and transmission and hydraulic fluids are at the maximum levels.

Once these actions are taken, will contact the following:

Agency	Telephone #	Contacted	Time	Time of Arrival
NY State Department of Environmental Conservation	800 457-7362			
NYC DEP	800 457-7362			
NY State Health Department	212 268-7001			

NY City Health Department	212 788-4423			
U.S. Army Corps of Engineering	201 433-6110 201 333-1170			

Follow up Procedure:

- A. When a barge sinks the operation to clean-up and unload the refuse shall continue twenty-four hours a day until the operation is complete. This includes Saturday, Sunday and Holidays.
- B. Arrangements shall be made to ensure the security of all motorized marine and surface equipment, and any supplies required to conduct the clean-up operations.
- C. The deployment and operation of the containment boom(s) shall be monitored by the SWM Supervisors and designated personnel to ensure their proper use and effective utilization.
- D. The Deputy Director of Solid Waste Management, Bureau Contracting Officer (BCO) – Reina Beza that the Bureau must issue an emergency contract for the salvage services and he/she will provide the BCO with the following information:
 - I. The details of the incident requiring the issuance of an emergency contract;
 - II. The proposed method of soliciting bids for the emergency contract;
 - III. The estimate amount of the award; and
 - IV. Such other information as may be requested by the BCO. The BCO will obtain approval for the issuance of the emergency contract from the Agency Chief Contracting Officer (ACCO) and the oversight agencies whose approval may be required by the Procurement Board (PPB) rules. The BCO will also be responsible for preparing the documentation required for securing such approval.

- E. The Deputy Director of SWM, in cooperation with the Department's General Counsel, shall prepare the solicitation for the Contract to Salvage the Sunken Vessel.
- F. A date will be selected for the acceptance of the bids for the solicitation. The Deputy Director SWM will notify all of the prospective vendors listed on Exhibit A of the solicitation of bids for the Contract to Salvage (raise) the sunken vessel (barge). Telephone calls will be made and documented. The prospective vendor shall be informed that copies of the contract (the specifications) may be picked up at the Contract Unit of the Department of Sanitation which is located 59 Maiden Lane, 5th Floor, New York, New York. The documents will be available from 9:30 am to 4:00 pm commencing **Date**. The bid deposit is \$.00. It is payable by certified check or money order payable to the Comptroller of the City of New York. Cash will not be accepted. The bid opening is schedule to be held at 10:30 am on **Date** at the Contracting Unit at the above location.
- G. Following the bid opening the lowest responsive and responsible bidder shall be identified by the Deputy Director of SWM. The Contract Unit of the ACCO's office in cooperation with the Deputy Director of SWM, the BCO and the Department's General Counsel shall arrange for the execution of the Contract the commencement of work thereunder and the registration of the Contract.
- H. The Director of Administration shall monitor the costs incurred as a result of the incident. He/she shall prepare a report on the total cost incurred as a result of the incident following the conclusion of clean-up and salvage operations.
- I. A complete and accurate report on all the events associated with the incident and the actions that were taken from the initial notice if the sunken vessel until the completion of the clean-up of debris from the vessel and the salvage of the barge(s) shall be prepared and submitted to the Deputy Director of SWM no later than ten (10) calendar days following the completion of clean-up and salvage operations. The report shall include, but shall not be limited to, the information set forth in the chart on page 10; the person/unit responsible for assembling that information is designated.
- J. The Deputy Director of SWM will review the report to ensure that it is accurate and complete. He/she will add recommendations, if any, concerning measures which may be taken to avoid a repetition of the Sunken Vessel incident.
- K. The Deputy Director of SWM will submit the report to the Deputy Commissioner of SWM for his/her review within five (5) calendar days after the Deputy Commissioner of SWM receipt of the report.

- L. The Deputy Commissioner will disseminate the report to the appropriate members of the staff of the Department of Sanitation.

Description of the Information	Person /Unit Responsible for Assembling the Information
A complete copy of the Sunken Vessel Procedure listing all of the actions taken and the time each action was taken	O.C.O.
A record of the actions taken during the incident on each day by each shift including completed Daily Utilization of Personnel and additional equipment forms (copies are attached)	O.C.O
Approval of the issuance of Emergency Contract to Salvage the Sunken Vessel	O.C.O.
The Solicitation for the Contract to Salvage the Sunken Vessel	Director of SWM
The Contract to Salvage the Sunken Vessel	Director of SWM
The total cost incurred by the Solid Waste Management Unit as a result of the incident.	Director of SWM Administrative Services