CONTRACTOR SAFETY MANUAL

Transfer Stations

METRO

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Metro Solid Waste Operations
Parks and Environmental Services
600 NE Grand Ave.
Portland, OR 97232-2736
Ph: 503-797-1650, Fax: 503-797-1795

CONTRACTOR SAFETY MANUAL

Preface

This document is intended to provide Contractors and their subcontractors with the essential safety and health information required to successfully complete tasks while working at Metro Transfer Stations. This manual highlights some of the key regulatory requirements, and identifies critical safety procedures essential to protecting vital agency resources. It is not intended to replace or limit requirements imposed by federal, state or local regulations or be in conflict with requirements for permitted operations.

Metro constantly strives to maintain a safe and healthy workplace for employees and Contractors. Additionally, Metro is cognizant that our operations may impact the environment and our goal is to minimize any adverse environmental effects. To meet these goals we need assistance from our contractors. The Contractor shall report any unsafe work condition or environmental condition which has or could have an adverse impact. The Contractors' employees shall refuse to work if an unsafe condition is not corrected.

Safety and health practices and procedures evolve from experience gained over many years. While these guidelines are helpful in preventing accidents, good judgment and common sense also play an important role in accident prevention. It is the Contractor and its employees' responsibility to work safely and to insist that others working with them do the same. Before undertaking a task take a moment to think about safety and the consequences of your actions.

All Contractor employees are required to participate in the Metro safety program as indicated in this manual. Metro appreciates the commitment of our Contractors with regard to our cooperative safety efforts.

1.0 INTRODUCTION

Contractors are required to comply with all applicable Federal, State and local safety, health and environmental regulations including all Metro site-specific procedures applicable to the scope of work being conducted. All Contractors shall have, and adhere to, their own safety and health program. The guidelines presented in this document are not an exhaustive list of all applicable requirements and regulations for the Contractor to conduct work for Metro, instead, these guidelines highlight certain standards that may be applicable for the Contractor based on the scope of work.

It is essential that these rules and safety responsibilities are understood before starting work on Metro property. Violating safety requirements could jeopardize the welfare of the Contractor and/or Metro employees and could result in expulsion from Metro property, and deny the Contractor the opportunity to be considered for future Metro contracts.

Metro updates this manual periodically. As part of the Contractors obligation, the Contractor shall request from Metro an updated Contractor Safety Manual annually throughout the term of the contract.

Metro requires that Contractors:

- Comply at all times with federal, state and local safety and health laws, regulations and requirements
- Maintain communication with the Metro contract manager throughout the duration of the contract
- Commit to worker health, safety and environmental protection
- Maintain an effective safety and health compliance program
- Employ only trained qualified individuals at the work site
- Provide employees with appropriate equipment and training to protect workers and eliminate adverse environmental impacts
- Work in a legal and ethical manner to protect the environment, as well as the health and safety of their work force at the work site
- Cease operations immediately if a health, safety or environmental hazard exists at the work site
- Survey the work site to identify activities that may create safety hazards or adverse impacts to the environment or the public
- Hold worksite safety meetings with all affected employees
- Perform safety, health and environmental site audits to identify and correct substandard conditions and work practices

3.0 CONTRACTORS SAFETY PROGRAM – REQUIRED ELEMENTS

The following are the primary occupational health, safety and environmental rules applicable to Metro operations. Contractors must be in compliance with established safety and health standards and guidelines. A complete set of standards may be found in OAR 437 and OSHA Rules and Regulations for General Industry, 29 CFR 1910.

Metro has specific written programs and procedures which are incorporated as appendixes into this document or are available separately. In an effort to ensure a safe and healthful environment, the Contractor will abide by all Metro-specific work practices and guidelines.

The Contractors written safety program must include the following elements:

3.1 Safety Policy Statement

The Contractor shall develop a written policy statement which describes how management supports the overall safety efforts of the Contractor. The policy statement should include, at minimum, the following:

- How management establishes and maintains a positive safety culture
- The Contractors environmental health and safety goals
- A description of how resources are dedicated in support the Contractors goals
- How management participates and is directly involved in the safety and health program

3.2 Safety & Health Program Description

Provide an overview of the Contractors safety and health program. Describe the programs components and the Contractors overall strategy for providing a safe and healthful workplace.

3.3 Safety Responsibilities

Describe the safety responsibilities for individuals at all levels of the organization.

- First aid, safety and health equipment
- Posters, signs required by OSHA and Workers Safety and health and safety practices
- Accident reporting records
- Employee training provided, such as health and safety talks, worker orientation
- Records maintained
- Equipment and tools (hand, power, welding, etc.): condition, use.
- Protective guards and devices: availability, use, proper *maintenance and* operating condition
- Housekeeping: maintaining clean work areas, free of trash/debris accumulation, tripping, and slipping hazards
- Lighting: for adequacy and safety
- Sanitation: water, toilets for cleanliness and proper operation
- Noise hazards, hearing protection
- Ventilation for gases, vapors, fumes, dusts
- Availability of personal protective equipment: Hard hats/head protection, respirators, safety harnesses, life lines, safety shoes, eye protection, gloves
- Fire protection, prevention and control, use of fire protection equipment
- Temporary buildings, trailers, sheds
- Open yard storage
- Storage of flammable and combustible liquids including service and refueling areas for vehicles
- Temporary heating devices
- Fall protection requirements: in place and in use
- Electrical system and devices; condition and use of cords; ground fault protection; circuit breaker panels; receptacles and switches
- Openings – floor, wall, safety railings
- Materials – handling equipment and elevators
- Ladders: condition *and use*
- Hazard communication program and material safety data sheets (MSDS)
- Stairways: safety railings, condition
- Scaffolds: Safety railings, secured
- Lockout/Tagout procedures
- Machines and equipment: condition, guards in place
- Forklifts, etc: condition, operation
- Preventive maintenance program: all inclusive, up to date
- Other items as appropriate

3.10 Safety Education & Training

The Contractor shall review necessary training requirements based on the work being performed and include training time frames or schedules in this section. Training outlines/guidelines should also be developed to ensure all areas/items are covered in this training. The Contractor shall develop and implement an employee education and training program as follows:

- New employees will be provided orientation training and will be furnished information and literature covering health and safety policies, rules, and procedures. This orientation training must be provided prior to the employee's exposure to the work environment and must cover the general safety rules listed in this manual.
- Individual job/task training will be provided to all employees. Included in this training are the applicable regulations & standards for their job; the recognition, avoidance, and prevention of unsafe conditions; areas and activities that require personal protection equipment; and how to use protective equipment (such as respirators, etc.).
- On-going safety training sessions will be conducted to provide information and training on new equipment, new procedures, new chemicals, refresher/remedial training in specific areas, or meet annual requirements.
- Various individual Workers' Safety programs specify that training be provided to employees. Supervisors will ensure their employees are scheduled and provided this training as required. Examples of specified training include (but not limited to):
    - Safety Committee
    - Emergency Procedures
    - Fire extinguisher training
    - Occupational Noise Exposure
    - Personal Protective Equipment
    - Respiratory Protection
    - Permit-Required Confined Spaces
    - Hazardous Energy Control (lockout/tagout)
    - Powered Industrial Trucks
    - Welding, Cutting, and Brazing
    - Electrical
        - Blood-borne pathogens
        - Hazard communication
        - Fall Protection

- Training addressed above will be documented in the employees' personnel records and/or in a master training record.
- Employees scheduled for any safety and health training will attend such training.

3.11b Housekeeping

Proper housekeeping is the foundation for a safe work environment. It definitely helps prevent accidents and fires, as well as creating a professional appearance in the work area.

- All work areas, floors, aisles, and stairways will be kept clean and orderly, and free of tripping and slipping hazards. Oils, greases, and other liquids will be immediately cleaned up if spilled.
- Combustible scrap, debris, and garbage shall be removed from the work area at frequent and regular intervals.
- Stairways, walkways, exit doors, in front of electrical panels, or access to firefighting equipment will be kept clear of storage, materials, supplies, trash, and other debris at all times.
- Overhead storage areas will be marked as to maximum load rating.

3.11c Fire Prevention

- All portable fire extinguishers will be conspicuously located, accessible, and maintained in operating condition. Portable fire extinguishers will receive an annual service check and a monthly visual inspection. These will be documented on the tag on the extinguisher or other form.
- All employees must know the location of firefighting equipment in the work area and have knowledge of its use and application.
- Exits will be marked as such by a readily visible sign. Other doors likely to be mistaken for an exit will be marked as to their character or "Not an Exit".
- Only approved safety cans shall be used for handling or storing flammable liquids in quantities greater than one gallon. For one or less gallon, only the original container or a safety-can will be used.
- When heat producing equipment is used, the work area must be kept clear of all fire hazards and all sources of potential fires will be eliminated.
- Fire extinguishers will be available at all times when utilizing heat-producing equipment.

level and there are no guardrails or other form of fall protection, and on certain suspended scaffolds. Each employee will be on a separate safety line, and this line will be adjusted so that the employee cannot fall more than six feet.

3.11f Lockout/Tagout Program

- Before any work or maintenance is performed on any machine, equipment, tool, or electrical system, they will be made totally safe before work starts by removing any source of energy or power to them, such as electrical, air/hydraulic pressure, spring/stored energy, or thermal (heat/cold).
- The Lockout/Tagout Program provides for a safe method of working on, near, or in machinery or equipment that can cause serious injury. This program will be used by all employees to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment, or release of stored energy, could cause injury.

3.11g Electrical

- Live electrical parts shall be guarded against accidental contact by cabinets, enclosures, location, or guarding. Open circuit breaker openings or knock out holes, broken receptacles/switches, missing covering plates, etc., will be reported to supervisors for repair or replacement.
- Working and clear space around electric equipment and distribution boxes will be kept clear and assessable.
- Circuit breakers, switch boxes, etc. will be legibly marked to indicate its purpose.
- All extension cords and electric powered tools (except double insulated) will be grounded. Ground prongs will not be removed.
- Electric cords and their strain relief devices will be in good condition, with no splices.
- Electric wiring/cords entering/exiting any panel/control/junction box will be secured with clamps or other appropriate strain relief device.
- Extension cords and other flexible cords will not be used in lieu of permanent wiring and receptacles. Cords will not be run through holes in doors, walls, windows, nor will they be fastened to walls, poles, equipment, etc.

- Portable ladders will extend at least three feet above the upper level to which the ladder is used to gain access.
- The top of a stepladder will not be used as step.
- Only one person will be on a ladder at a time.

3.11k Flammable and Combustible Liquids

- Only approved safety cans, original containers, or portable tanks will be used to store flammable or combustible liquids.
- Above ground storage tanks will be separated from each other by a minimum of three feet or 1/6 the sum of their diameters. Dikes or drainage to prevent accidental discharge from reaching adjoining property or waterways will be provided.
- No more than 25 gallons of Class IA and 120 gallons of Class IB, IC, II, or III liquids may be stored outside a storage cabinet or an inside storage room.
- An emergency shut off switch located 15 – 75 feet from the pumps and a fire extinguisher will be provided at company fuel servicing areas.

3.11l Cranes/Hoists

- All cranes/hoists will be inspected prior to each use/during use to make sure it is in safe operating condition.
- A monthly inspection of hooks, running ropes, and hoist chains will be made and a certification record to include date, inspector signature, and hook/rope/chain identifier will be maintained.
- Inspections of frequent (daily-monthly) and periodic (1-12 months) intervals, depending on severity of use, will be made of all cranes. See 1910.179(j) for inspection requirements.
- The rated load of the crane/hoist will be plainly marked on each side of the crane. If the crane has more than one hoisting unit, each rating will be marked on the unit or its load block.
- Loads will never be swung over the heads of workers in the area.
- Tag lines must be used to control loads and keep workers away.
- Loads, booms, and rigging will be kept at least 10 feet of energized electrical lines rated 50KV or lower unless the lines are de-energized. For lines rated greater that 50 KV follow Safety Rules and Regulations, 1910.180(j).

kickback teeth and spreaders will be used when rip sawing.

- Portable abrasive side-winder grinders will have guards installed covering the upper and back portions of the abrasive wheel. Wheel speed ratings will never be less than the grinder RPM speed.
- Pedestal grinders will be permanently mounted, tool rests installed and adjusted to within 1/8 inch of the wheel, tongue guards installed and adjusted to within 1/4 inch of the wheel, and side spindle/nut guards installed.
- Air compressor receivers will be drained frequently to prevent buildup of water in the tank.
- Compressed air will not be used for cleaning purposes except when pressure is reduced to less than 30 psi by regulating or use of a safety nozzle, and then only with effective chip guarding and proper personal protective equipment.
- Any employee-furnished tools of any nature must meet all OSHAs' Safety and ANSI requirements.

3.11o Safety Railings and Other Fall Protection

- All open sided floors and platforms four feet or more above adjacent floor/ground level will be guarded by a standard railing (top and mid rail, toeboard if required).
- All stairways of four or more risers will be guarded by a handrail, or stair rails on the open side. Handrails or stair rails will be provided on both sides if the stairs are more than 44 inches wide.
- When a hole or floor opening is created during a work activity, a cover or a barricade must be installed immediately.
- Safety harnesses, belts, lanyards, lines, and lifelines may be used in lieu of other fall protection systems to provide the required fall protection.
- Adjustment of lanyards must provide for a not more than a six foot fall, and all tie off points must be at least waist high.

3.11p Scaffolds

- Scaffold platforms more than ten feet above the ground, floor, or lower level will have standard guardrails (consisting of toprail, midrail, and toeboard) installed on all open sides and ends of platforms.
- Planking will be laid tight; overlap at least 12 inches, and extend over end supports 6 – 12 inches.

The following are required in your emergency action plan:

- Emergency-escape procedures and escape-route assignments
- Procedures for employees who must oversee critical plant operations before evacuating
- Procedures to account for all employees after an evacuation
- Employee rescue and medical duties
- Procedures to report fires and other emergencies
- Names of persons to contact for information about employees' duties under the plan

Metro recognizes that emergencies can occur in all areas of operation; both Metro's and the Contractors, which have the potential to impact the ability to safely operate our facilities. As such, the Contractor will be required to participate with Metro regarding Emergency Response Plans and the Emergency Response Team.

Contractors are required to follow all procedures contained in Metro's site specific EAP, and ensure that all transfer station employees utilize the plan to effectively respond to emergencies.

- Contractor staff serves as evacuation coordinators in their immediate work areas
- Contractor Supervisor is the Incident Commander during the evacuation and assessment phase of all incidents
- Each site must have specific evacuation procedures and posted site plans with evacuation routes noted
- Evacuation plan must be tested at least twice annually
- Metro's Response Levels Chart shall be used to determine appropriate actions in hazardous materials emergencies

3.13b Fire Prevention Plan
(OAR 437, Division 2, Subdivision E, 437-002-0043)

The Contractor must have a written fire-prevention plan. The following elements are required in your fire-prevention plan:

- A list of all fire hazards in the workplace
- Procedures to control accumulations of flammable waste materials
- Procedures to maintain safeguards on heaters

Contractors are responsible for ensuring that Haz-Mat Technicians are trained (24-hours) and certified at the HAZWOPER – First Responder, Technician level prior to handling hazardous waste and or performing incidental spill response and clean-up.

Haz-Mat Technicians may participate in emergency response and clean-up operations under the direction of the Emergency Response Team Incident Commander **only** after receiving an additional 16-hours of training required for certification at the HAZWOPER – ERT, Technician level (40-hour certificate) and have received a baseline Haz-Mat physical examination and are certified by a qualified occupational physician.

Haz-Mat Technicians may participate only as members of Metro's ERT under the direction of a Metro authorized Safety / Operations Officer.

3.16 Personal Protective Equipment – general requirements
(OAR 437, Division 2, Subdivision I, §1910.132)

The Contractor must assess the workplaces to determine if hazards are present, or are likely to be present, which necessitates the use/wear of personal protective equipment (eye/face, head, foot, or hand protection). This assessment must be documented through a written certification that identifies the workplace evaluated, the person certifying that the assessment has been completed, the date(s) of the assessment, and which identifies the document as a certification of hazard assessment.

You must also document that employees who use personal protective equipment have been properly trained.

Record:
- The names of those who have been trained
- Their training dates
- The training topic

Protective Equipment required for employees working in and around Transfer Stations will include standard items such as: steel toe boots, steel sole inserts, safety glasses, hard-hats, high visibility clothing, gloves and hearing protection as appropriate for the task and area.

These general requirements apply to eye and face, head, foot, and head protection. They do not apply to respirators (see 1910.134) or electrical protective equipment (see 1910.137).

Contractor shall inform any sub-contractor performing permit required confined space entry operations of any known hazards in each confined space to be entered. The Contractor shall serve as the Host Employer.

The following additional requirements apply:

- The Contractor must supply and maintain all equipment necessary to safety enter, work in and perform rescue from permitted confined spaces.
- The Contractor must follow Metro's alternative confined space plan.
- The Contractor must inform Metro of any new spaces or changes in existing confined spaces and provide a copy of a *confined space assessment.*

The following documents are provided as appendices:
- Confined Space Program
- Confined Space Entry Plan
- Confined Space Assessments, Central
- Confined Space Assessments, South

3.19 Hazardous Energy Control (lockout/tagout)
(OAR 437, Division 2, Subdivision J, §1910.147)

The Contractor shall develop a written energy control (lockout/tagout) program which documents energy-control procedures, periodic inspections, and employee training to ensure that employees are protected from unexpected releases of hazardous energy to include electrical, hydraulic, pneumatic, heat, or chemicals.

Energy-control procedures – The written procedures must clearly identify
- energy sources in the workplace
- describe how workers will secure energy-isolating devices
- use and remove locks and tags, and
- test energy-isolating devices

Periodic inspection – *The periodic inspection is an annual review* of the energy-control procedures for equipment that is locked out or tagged out. It's an independent evaluation by an authorized employee who understands the energy-control procedures for the equipment.

3.22 Mechanical Power Presses
(OAR 437, Division 2, Subdivision O, §1910.217)

If the Contractor utilizes mechanical presses on-site, each press must be inspected and tested at least weekly to determine the condition of the clutch/brake mechanism, anti-repeat feature, and single-stroke mechanism.

Keep a written record that includes the inspection date, the inspector's signature, and the power press serial number or other identifier.

3.23 Welding, Cutting, and Brazing – general requirements
(OAR 437, Division 2, Subdivision Q, §1910.252)

Before cutting or welding is permitted, the person responsible for authorizing cutting and welding operations must inspect the area and establish safety precautions, preferably in the form of a written permit.

3.24 Electrical – selection and use of work practices
(OAR 437, Division 2, Subdivision S, §1910.333)

This rule covers locking and tagging procedures for those who work on or near exposed, de-energized parts.

If a worker could contact parts of fixed electric equipment or circuits that have been de-energized, the circuits must be locked out or tagged.

The Contractor must keep a copy of the locking and tagging procedures.

3.25 Blood-borne pathogens
(OAR 437, Division 2, Subdivision Z, §1910.1030)

Metro conducted an exposure determination and has concluded that all transfer station employees may come into contact with potentially infectious materials on the job. Contractors must comply with OSHA's Blood-Borne Pathogens standard.

The Contractor must have a written exposure-control plan to eliminate or minimize exposure to blood-borne pathogens. The exposure control plan must be updated annually.

Elements of the plan:

- Determine the employees who may be exposed

3.28 Material Handling Equipment
(OAR 437, Division 3, Subdivision O, §1926.602)

The Contractor must certify (in writing) that each employee who operates a forklift has been trained and evaluated and found competent to operate the forklift.

The certification must include:
- The name of the operator
- The date of the training
- The date of the evaluation
- The name of the persons performing the training or evaluation

4.0 COMMUNICATIONS

An open line of communications between Metro, the Transfer Station contractor, sub-contractors and service providers is a vital link in ensuring the successful operation of the Transfer Stations. As such, Metro has identified the following necessary communication guidelines.

4.1 Emergencies

The Contractor shall immediately notify Metro by pager if a death, hospitalization, disabling injury, significant property damage or hazardous release occurs at the site.

The Contractors shall notify Metro immediately by cell phone of all incidents that require transfer station evacuation, whenever 9-1-1 is called, and whenever operations are halted for emergency response.

The Contractor must promptly report in writing to Metro all accidents whatsoever arising out of, or in connection with the performance of the work whether on or adjacent to the site, giving full details and statements of witnesses.

Every injury, exposure, release, or other emergency incident must be investigated by the Supervisor on site to determine the cause and the methods prevent reoccurrence. Metro may investigate incidents at any time. All findings will be reviewed in the monthly site coordination meeting.

The Contractor shall make any required agency notifications including Or-OSHA, OEM and DEQ in the event of an accident, material release or injury that requires such notification by law and or permit.

4.4 Regulatory Compliance

Contractor shall notify Metro immediately of any formal inspections and the results of such inspections, including but not limited to internal or third party safety audits, fire inspectors, insurance adjustors, Or-OSHA, DEQ or EPA inspections.

Copies of any such inspection or audit report, along with any corrective actions shall be provided to Metro as part of the monthly reporting requirements.

Contractor shall keep copies of all audits and inspections on site in the Contractor's office during the course of the contract.

4.5 Documentation

All incidents, accidents and near misses must be documented and reported to Metro.

- Haz-Mat Technicians must log every incident of Unacceptable Waste on an Unacceptable Waste Form.
- Spills and releases are reported on Metro's Spill Summary Form.
- Accident / Incident Report forms and Incident Investigation forms are used to report injuries, hazards and near miss situations.
- Operations / Safety Plan must be completed for every Level 1, 2 and 3 incident.
- Photos, statements from witnesses, and a log of actions taken must be submitted to the Facilities Supervisor as soon as possible after each incident.
- Incident reports, investigation reports and any other findings will be reviewed monthly in the site coordination meeting between Metro and the contractor.

All forms are electronic and may be submitted by e-mail to penny.erickson@oregonmetro.gov

4.6 Service Contractors

The Contractor shall notify service contractors performing work on site of all known hazards and the emergency evacuation procedures for the site. This notification shall be documented by using a Contractor Notification form.

5.3 Training Matrix – Hazardous Materials

Course	Supervisor	Office Staff	Temps – Unloaders	Pickers	Spotters	Loader & Equipment Operators	Haz-Mat Compactor Operators
Fire Extinguishers	X	X		X	X	X	X
Fixed Fire Systems	X						
First Aid / CPR	X				X	X	X
Hazard Communication – EAP Awareness (2-hr)	Trainer	X	X	X	X	X	X
HAZWOPER Awareness Level (8-hr)				X	X	X	
HAZWOPER Operations Level (24-hr)						X	X
HAZWOPER Technician Level (16-hr)	X						X
HAZWOPER IC/SO/Ops	X						
HWF Sorting (8-hr)						X	X
Site Specific & Load Check (8-hr)						X	X

6.0 FUNCTIONAL SUPPORT POSITION DUTIES

6.1 Haz-Mat Technician

- Load Check for Hazardous & Infectious Medical Waste
- Maintain the Public Hazardous Materials Recycling Area
- Maintain the Hazardous Waste Storage Area
- Sort incidental amounts of household hazardous waste discovered in the Transfer Station
- Assess all Transfer Station hazardous materials incidents to determine appropriate incident response
- Report all Transfer Station hazardous materials incidents to the Metro Management Support Team at the time of the event
- Assess and clean-up Incidental Spills of Hazardous Materials
- Provide Metro with documentation incidents and tasks performed
- Maintain all necessary safety and spill response supplies and equipment
- Assist in enforcing all applicable safety procedures and waste

7.3 Hazardous Waste Area

The Hazardous Waste Storage Area provides interim, segregated and contained storage for hazardous materials delivered to or discovered at Metro Transfer Stations. Contractor Haz-Mat Technicians maintain this area as part of daily responsibilities. Collected hazardous materials shall be transported daily from the storage area to the HW Facility for processing.

Contractor shall ensure that the hazardous waste storage area is equipped with appropriate containment, chemical segregation and warning signs. All interim storage containers must be clearly and prominently labeled with warning signs which show the chemical name and hazard category. Contractor shall maintain all hazardous waste storage areas and containers as required by Metro.

7.3a Sorting & Secondary Containment
To prevent chemical reactions, wastes must be segregated into basic hazard categories and stored in labeled secondary containment bins immediately upon discovery in the transfer station.

Metro's Master Waste List is used to determine segregation categories for each material.

Waste Sorting and Storage Procedures are included in a separate document.

7.3b Warning Signs, Labels and Markings
Each storage container (secondary containment bin) must be clearly labeled with appropriate DOT pictorial labels and correct corresponding words for the category of waste it contains.

Access to the Hazardous Waste Storage Area must be restricted by barriers and clearly marked with the words ***"Warning – Hazardous Waste Area – Authorized Personnel Only"*** and ***"No Smoking"*** at each entrance. Access to the area should be restricted to allow trained personnel only.

7.3c Personal Protective Equipment

Contractor shall provide all personal protective equipment, respirators, uniforms, gloves, aprons, sorting tools, and any other equipment necessary or required by Metro, OSHA, or

Decontamination Equipment

Equipment	Requirements
Baby Wipes	In immediate work area
Hand soap	Regular hand-washing facilities accessible to employees at all times
Eye-wash Bottles	In immediate work area (stored in spill kits)
Eyewash/Safety Shower	Within 10 seconds, access not blocked
Bleach	In immediate work area (stored in "Infection Control Kit")

7.4 Medical Waste Holding Area

Medical waste; sharps containers are stored for disposal in holding bins inside the Hazardous Waste Area. Access to the Medical Waste Holding Area should be restricted with additional barriers and signs. Signs should read ***"Warning – Biohazardous Waste – Authorized Personnel Only."***

All employees should be instructed to cone off any discovered sharps and wait for a trained technician. An infectious materials kit must be readily available with tongs, hand tools and bleach.

7.5 Recyclable Hazardous Materials

Contractor shall develop specific procedures for safe handling and storage of potentially hazardous materials including, but not limited to:

- Oil and oil filters
- Antifreeze
- Automotive Batteries
- Propane and other compressed gas cylinders
- Refrigerant containing items

7.5 Safety Work Practices

All hazardous materials must be handled according to these general safe work practices:

- All materials must be contained before placing in holding bins
- All materials must be segregated and properly stored immediately upon discovery in the transfer station
- Hazardous materials **must not** be hand-carried. Use chemical cart, pail, or tub to move hazardous materials from the tipping floor to the Hazardous Waste Storage Area.

8.2 Emergency Action Plan

This plan consists of immediate actions taken by the contractor to protect life safety in the event of an emergency. The Contractor Supervisor is the Incident Commander during all evacuation situations. The EAP contains:

- Emergency Action Quick Guide
- Site Evacuation Procedures and Maps
- Response Levels Chart
- Incident Commander, Command Safety Officer, Public Information Officer checklists
- Spill and Accident Reports
- Contractor Emergency Plans

8.3 Emergency Response Plan

This Emergency Response Plan provides guidelines for the Emergency Response Team (ERT) to assess, plan and respond to hazardous materials incidents and other emergencies after the site is evacuated. ERT Procedures include:

- Response Levels Chart
- Operations Safety Plan Form
- ERT Checklists for Operations Officer, Safety Officer, Entry Team Leader, Decon Officer and Recorder
- Level B Personal Protective Equipment training and practice
- Specific training requirements for Operations Officer, Safety Officer and ERT member
- Post-incident Debrief and Spill Summary Form
- Contractor Contingency Plans

8.4 Fuel & Hydraulic Fluid Spills

Contractor must have written procedures and appropriate equipment available for responding to fuel spills and overfills at all fueling stations.

Contractor must have written procedures and equipment available for controlling and responding to hydraulic fluid releases from compactors and other equipment.

Contractor must have appropriate equipment available to protect storm drains and sewers from spills of hazardous chemicals, fuel or other contaminants.

9.3 Material Handling Equipment

The following items MUST be available to Haz-Mat Technicians at all times:

Storage Containers	Spill Supplies	Tools
2 - Cages with liners 2 - Skids 4 - Holding tubs 3 - Drums 1 - Containment Pallet 2 - Chem. Transport Carts 1 - Med-Waste Holding Bin 2 - 5-gallon pails w/ lids 2 - 1-gallon pails w/ lids 2 - Sharps Containers	Area Spill Kit Barrier Tape and Signs Paper Towels Inorganic absorbent (Superfine) Absorbent pillows or booms Sodium Bicarbonate (for acid neutralization) Spray bottles with Asbestos Surfactant Infectious Materials Spill Kit Secondary Containment (duct tape, pails, and zip-lock bags)	Various Hand Tools: claw tools, rake, tongs, forceps, spark proof shovel, broom Camera Paint Pens Metro's Master Waste List Emergency Action Plan

METRO

Transfer Station Alarm and Site Evacuation Procedures

METRO CENTRAL 2000

1. **Fire Alarm or Evacuation Alarm sounds, or evacuation is started verbally by BFI.**

2. **Evacuate Transfer Station Building**

BFI employees immediately evacuate all people from the Transfer Station building.

- Evacuate all people through the nearest exit. Walk with the group to one of two assembly points
- Assembly points are located at the Main Entrance near the gate, and at the Truck Exit, near the BFI Office.

3. **Incident Commander begins on-site notification by alerting Scalehouse**
   - Scalehouse alerts HWF, STS, construction areas and office areas by radio or telephone
   - All EC's check in with IC on Radio
   - Scalehouse EC notifies and accounts for all Scalehouse personnel.
   - BFI will begin evacuating public to the Assembly Point.

4. **Scalehouse staff make off-site notifications – EC may have SH staff assemble in Scalehouse A.**
   - 9-1-1 or see ES Emergency Phone List for Metro and neighbor numbers
   - Contact 2 of the following people
     - Penny Erickson – pager 301-5965
     - Kim Liebich – pager 301-4861

5. **HWF – EC Alerts all staff**
   - All people in HWF and Scalehouse B go to Scalehouse B for ERT instructions
   - HWF customers can remain in line until instructed to evacuate.
   - HWF Ops Officer go to Command Post (either BFI office or near ERT shed)
   - HWF may pull response trailer with forktruck to assembly point or to ERT staging area as determined by the Ops Officer and IC.

METRO

METRO TRANSFER STATION OPERATIONS LOAD CHECK PROGRAM

INTRODUCTION

Why screen waste?

EPA rules require landfill operators to implement procedures to detect and prevent hazardous waste and PCBs from disposal in MSW landfills. At a minimum, these procedures must include: *random inspection* of incoming loads; record keeping; training of MSW facility personnel; and state notification if hazardous waste or PCBs are discovered. Though EPA rules are aimed at landfills, load check programs are often conducted at transfer stations and other intermediate processing facilities. At these facilities unacceptable waste is often easier to detect. In addition facility operators may reduce their liability, as well as produce waste that is more acceptable when it eventually reaches a landfill.

What is included in a load check program?

- constant load screening, visual inspections at the time of tipping
- random load inspection of incoming loads to the facility
- record keeping for these inspections
- inspection training for facility personnel
- procedures for management of suspect waste(s)
- procedures for notification of relevant authorities should problems occur
- cost tracking and reimbursement for extraordinary costs

What types of waste are potentially unacceptable?

agricultural chemical containers
ashes and incinerator residues
industrial waste dusts and sludges
lead-acid batteries
PCBs
Pesticides
regulated hazardous waste
sewage sludge and grit
asbestos (friable and non-friable)
contaminated soils
infectious medical waste
liquids
paints & solvents
radioactive wastes
refrigerant containing wastes
used oil and oil filters

WASTE SCREENING PROCEDURES

At Metro's transfer station most operations on the transfer station floor are conducted by a primary operations contractor at each site. Under Metro's contract with the operator,

instructed, by the operations contractor, to dump the load in the specific, separated area for inspection. The hauler will be encouraged to wait for the inspector to finish searching through the waste.

The inspector will pull bags or material from several areas within the load using a claw type tool. Each bag will be opened and inspected. A total of at least 20 large bags or 4 yards of material must be inspected.

All load inspections and unacceptable waste finds will be documented using the Metro Hazmat Response Report Form. If unacceptable materials are found the contractor shall make a substantial effort to determine the generator. If containers totalling more than 7 gallons are found, the inspector will contact the Metro Hazardous Waste Supervisor and provide documentation for further investigation. Generally quantities under 7 gallons consume more staff time and other resources than is justified by the benefits of tracking down the generator. Findings of less than 7 gallons will be documented, sorted and taken directly to the hazardous waste holding area. In unusual cases small quantities will justify efforts to track down the generator, such as acutely hazardous wastes ("P-listed" wastes under Oregon hazardous waste regulations), very expensive wastes such as reactives or compressed gas cylinders, or unusually hazardous wastes such as hydrofluoric acid.

Additional detail may be found in Metro's Hazardous Waste Procedures Manual regarding:

- written policies and procedures
- personal protective equipment
- proper tools and equipment
- pre-planned handling methods
- decon procedures for the inspection area and equipment

RECORDKEEPING

Records must be kept pursuant to an incident where regulated or prohibited waste is found at the facility. Records should be kept of all screening activities and incidents, whether or not regulated or prohibited wastes are found. This will help prove that the facility owner and operator has acted in a prudent and reasonable manner.

Metro's Unacceptable Waste Form will be used for each inspection. This form is compiled from information obtained by the facility contractor, Metro hazardous waste staff and Metro Management.

Once unacceptable materials are secure or segregated from the normal waste, the Metro Hazardous waste staff will attempt to determine the regulatory status of the suspect

arrangements based on DEQ guidance. If DEQ does not indicate an interest in continuing to investigate within one week of receiving a report, Metro may proceed with disposal arrangements.

(3) Are contents identified by a label? A label must contain sufficient information to determine the chemical makeup of the contents, and the appearance or form of the material inside must be consistent with the labeling.

(4) Identify. When the contents of an apparent unacceptable waste are not properly identified by a label, two approaches are used. If the waste is a commercial product, and the manufacturer is identified on the label, the manufacturer may be contacted by telephone for ingredient information. When no manufacturer is identified, or the manufacturer cannot be reached, then on-site identification must be performed. A system of identification of unknown hazardous materials has been developed in the course of the operations of Metro's household hazardous waste program. With minor modifications this system can be used to identify unacceptable wastes collected in Metro's transfer stations. In unusual circumstances, on-site identification techniques might be insufficient to properly identify a material, in which case a sample may be sent to an outside analytical lab for analysis.

(5) Would the material be classified as a hazardous waste under Oregon law? Refer to OAR 340-101. Materials found in the transfer stations that qualify as hazardous wastes will probably be either "listed wastes" or "characteristic wastes". Listed wastes are found using the P and U lists found in 40 CFR 261.33(e) and (f). Under Oregon law, any waste containing 3% or more of the P list, or 10% or more of the U list is considered a hazardous waste. Characteristic wastes are those that meet the characteristics of ignitability, reactivity, corrosivity, or toxicity described in 40 CFR 261.20 through 261.24.

(6) Select proper disposal option. Examples of unacceptable wastes that generally do not qualify as hazardous wastes include:

Latex paints, except for those high in lead and mercury

Cleaners between pH 3 and 11

Other low hazard liquids

conclusive identification of the generator, but still indicate a fully regulated generator.

(11) Illegal disposal incident. Contact DEQ for guidance. In some cases Metro may " take generator status for the purposes of disposal", but as per DEQ's Abandoned Hazardous Waste Policy will not truly be considered generator for the purposes of hazardous waste fees and taxes, or annual reports. If DEQ does not indicate an interest in continuing to investigate within one week of receiving a report, Metro may proceed with disposal arrangements. If Metro does assume generator status, and the waste includes materials considered Universal Wastes under OAR340-113, these materials may be disposed of through Metro's Universal Waste Program.

(12) Bring to HHW facility and follow standard sorting and disposal procedures. These procedures may be found in the facility operations manuals and S.O.P.'s.

NOTIFICATION

If a RCRA regulated waste is discovered during monitoring at any point in the facility, or during a random load inspection, the proper authorities must be notified. If applicable, Metro ERT must be notified in order to protect human health and the environment in the event that a potentially dangerous material is encountered. Part of this process will be the notification of the proper authorities. Notification requirements are spelled out in the above Regulatory status determination, or in the Emergency Response Plan. Organizations who may need to be contacted include:

- Metro HHW ERT
- DEQ
- Local Hazardous Materials Response Team
- Metro Enforcement Team

Numbers and contacts for each of the above are kept on file at each site.

M:\rem\es\projects\SOP\All HWF SOPS\TXSOPS\section 3 - load check and medical waste\Metro Load Check Program.doc

METRO

Transfer Station Load Check Standard Operating Procedure

March 2009

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Click on page number to view desired section.

- Respirators
- "Tyvek"
- Hard hat
- Eye protection
- Steel toed/insoled boots
- Gloves - Nitrile(inner), Supreme Nitrile(outer), leather

TOOLS

Contractor shall provide and use tools, to include but not limited to:

- Claw tools
- Box knife
- Secondary containment - plastic buckets, zip lock bags and containers/bags
- exhibiting the bio-hazard symbol.
- "Super fine"/ "Safe & Dry" absorbent
- Tongs
- Shovel
- Broom

INSPECTION PROCEDURE

Contractor shall:

- Direct the load to a designated area that does not interfere with regular operations.
- Place cones around the perimeter of the load so that it will not be disturbed until it has been properly inspected.
- Use proper PPE and safe handling methods.
- Pull bags or material away from the load using a claw tool.
- Using the claw tool, pull bags from all four sides of the load to expose the waste.
- Go through at least 20 bags or 4 yards of material.
- Remove any unacceptable waste found during load check and document on Metro Hazardous Waste Report Form

Small Amounts of Unacceptable Waste

Hazardous waste or unacceptable waste loads **less** than 7 gallons shall be segregated by the contractor into approved storage bins and brought to the Hazardous Waste Facility.

Segregation

Unacceptable items shall be segregated into the following categories:

Bases (high pH)

if you already received it from the driver).

4. Inventory the unacceptable material (on or attach to the Metro Hazmat Response Report).
5. If the generator is a homeowner or apartment complex (as long as it is being used for maintenance not for remodeling) give the generator a courtesy call to let them know that we will take their waste but it must be brought in separately. There is no charge for household waste, they do not need to pick up the waste - we will process it at the Hazardous Waste Facility.
6. Enter all load check loads into the Access/CEG program. (See instruction on "Entering load check into Access/CEG program)
7. If the generator is a business - Check the current DEQ list to see if the generator has a registered CEG, SQG or LQG status.
8. If the generator has a SQG or LQG status DEQ must be called to inform them of the situation and we will make disposal arrangements based on DEQ guidance. If DEQ does not indicate an interest in continuing to investigate within one week of receiving a report, Metro may proceed with disposal arrangements. Enter all information into Access/CEG program until disposal option or final disposition of the waste is determined.

REPORTING

When completing information on the load check reporting form, be concise with the following information; contact person(s), dates, times, phone numbers, brief and accurate notes. One copy will be turned over to transfer station contractor and one will be kept on file in the appropriate hazardous waste facility.

METRO

METRO MEDICAL WASTE ACCEPTANCE PROCEDURES

November 2000

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clinic or hospital, or from any animal research setting.

7) Sharps from commercial generators
8) Radioactive medical waste
9) Hazardous (chemical) waste
10) Waste that is capable of causing disease or adverse health effects in humans

B. Acceptable Medical Waste

The following items **are accepted** at Metro facilities along with regular solid waste.

Any hauler who delivers waste from a hospital to a Metro Regional Transfer Station must identify the generator of the waste to the Scalehouse Technician or load check personnel upon delivery.

1. Medical tubing and equipment that does not contain any sharps, blood or other potentially infectious materials.
2. Waste from hospitals, clinics and care facilities that is not potentially "Infectious Waste" or "Saturated Waste" under OAR 333-18-050.
3. Diapers that are not contaminated with blood or other potentially infectious materials. *(Diapers may contain low level radioactive waste that triggers monitors at Metro Transfer Stations. This material is subject to response procedures as per Metro's Radiation Response Standard Procedures)*
4. All waste from hospitals must be delivered in clear or clear-colored plastic bags.
5. Waste loads generated by hospitals are accepted at Metro Central and Metro South transfer stations during public operating hours only (7:00 am - 7:00 pm).
6. All solid, segregated, and mixed waste loads from hospitals are subject to inspection under Metro's Load Check and Hospital Load Check programs.

C. Treated (Non-Infectious) Medical Waste

a) All potentially infectious waste must be sorted at the point of generation to prevent disposal of unacceptable materials.

1. Disposal of all treated infectious waste requires a Metro Special Waste Permit.
   - A Metro Special Waste Permit Application can be obtained by contacting Metro Solid Waste and Recycling Department (SW&R) at (503) 797-1650.
2. All potentially infectious waste must be rendered non-infectious by an approved method of treatment (i.e., autoclave or other treatment method approved by the State as described in OAR333-18-060). This waste is referred to as "treated waste".
3. The hauler who delivers the waste to the Metro facility must identify the generator of the waste to the scalehouse technician upon delivery.
4. The treated waste must be accompanied with documentation stating that it has been properly treated. Written verification of the treatment is delivered to the transfer station operator/spotter at the time the waste is tipped at the Metro transfer station. These records must demonstrate that the generator has properly treated the waste according to

- A limit of 1% liquid (approximately 2.5 gallons per ton) with a maximum of 25 gallons per load.
- Organic or inorganic absorbent products may be used to absorb liquid released in container during storage and transport.

e) Hospitals must minimize holding time of waste before delivery to Metro transfer stations.

f) All loads are inspected during tipping at Metro transfer stations. Generator paperwork must be provided to the station operator/spotter at the time of delivery.

D. Animal Carcasses and Animal Waste

Rules regarding animal waste disposal are in place to prevent animal remains from showing up in the pit or on the floor. Once these remains are mixed with the regular trash it is often difficult to determine if they were animal or human.

Animal remains will be accepted under the following rules only:

1. Animal carcasses, waste or remains must be triple wrapped in plastic.
2. The customer must alert the scalehouse and spotter of the "animal carcass".
3. The animal carcass cannot be compacted inside a packer.
4. The animal carcass will be off loaded directly into the facility compactors.
5. Animal carcasses, waste or remains must not be unloaded directly onto the tipping floor or into the pit.

III METRO SPECIAL WASTE PERMIT FEES AND CHARGES

A. Metro Special Waste Application and Permit Fee

1. A Special Waste Permit Application can be obtained by contacting Metro Solid Waste and Recycling Department (SW&R) at (503)797-1650. A $25.00 Application fee is charged on submittal of the application to Metro SW&R.
2. An additional information and consent form is required for Metro Special Waste Permits for medical waste, which allows Metro to review autoclave methods, maintenance and testing, training and operator certification. Other conditions, including acceptable disposal times, disposal sites, and emergency response information are specified in the special waste permit.
   - Metro Special Waste Permits for medical waste are renewed annually.
   - Medical Waste Permits may be revoked if waste sorting, treatment, or response requirements of the special waste permit are not met.

B. Special Waste Fee

A special waste fee will be assessed for all loads containing treated medical waste of waste or ground sharps, as specified in Metro Code Chapter 5.02 in order to cover the additional costs of inspecting and managing these loads. Hospitals must obtain a special waste permit from Metro prior to delivering treated waste.

Metro does not accept commercially generated sharps unless they are treated, shredded and a Metro Special Waste Permit is obtained.

C. Treated and Shredded Sharps

Treated and shredded sharps are accepted from generators who have a Special Waste Permit for this specific waste stream.

Treated and shredded sharps may not be included with other solid or medical waste.

Sharps and containers must be:

1. Treated by appropriate sterilization method.
2. Delivered with appropriate documentation stating that each load of sharps was properly treated prior to shredding. Written verification of the treatment is delivered to the transfer station operator/spotter at the time the waste is tipped at the Metro transfer station. These records must demonstrate that the hospital has properly treated the waste according to the manufacturer, the Oregon Health Division, and the Metro Special Waste Permit. Records must include date, temperature and time of treatment, and signature by a designated person who is qualified to declare the waste sterilized. Metro will provide a sample waste declaration form with each Special Waste Permit.
3. Shredded into a standard classification of "unrecognizable" (samples are approved by Metro in Special Waste Permit Application).
4. Delivered separately from the mixed waste.
5. Delivered in rigid, puncture resistant outer containers of standard size that can be palletized.
   a) Container types are approved in each Metro Special Waste Permit.
   b) Puncture resistant cardboard, fiberboard, wood, metal or plastic containers may be approved by Metro.
6. Labeled with hazard warning or other labels as required by Metro.
7. Delivered to Metro South during hours the site is open to the public (7:00 am - 7:00 pm) or as specified on the special waste permit.
8. Acceptance requirements (such as time, site, containers) of this material will be specified on each Metro Special Waste Permit and are subject to change.

D. Sharps from Residential Sources

Sharps generated by residential users and delivered in approved sharps containers are accepted free of charge at Metro transfer stations and hazardous waste facilities.

1. Sharps Delivered by Residential Franchise Haulers

   Metro accepts sharps delivered by haulers at transfer stations under the following conditions:

   a) A residential customer must generate the sharps.
   b) The sharps must be delivered in approved sharps containers.

e) A one-time $5.00 program user fee will be charged. This charge includes a new sharps container and inclusion in the container exchange program.

5. Sharps Container Purchase

Sharps containers are not offered for sale by Metro. As part of the Sharps Container Exchange Program, Metro provides up to two approved sharps containers per customer, per visit, upon request of the customer.

6. Sharps Disposal Informational Brochures

Informational brochures are available through Metro Recycling Information Center (234-3000), Metro transfer stations and hazardous waste facilities, local governments, hospitals, medical clinics, and hauler associations. Information about this program is used by local hospitals to train nurses and sharps users, and to educate the public on proper disposal procedures.

V. METRO'S LOAD CHECK PROGRAM AND RESPONSE PROCEDURES

In order to prevent improper disposal, Metro has established procedures for ongoing spotting at the tipping floors, and has implemented a load-checking program to identify improperly disposed infectious waste prior to compaction and transport from Metro facilities.

Regular waste loads are inspected on a random basis.

All regular waste loads delivered from hospitals and other large commercial generators of infectious waste are inspected at Metro facilities. The hauler must inform the Scalehouse Technician of the source of each hospital load.

Spotters inspect all mixed-waste loads during tipping. The hauler must inform the Scalehouse Technician of the source of each mixed waste load. The hauler must present all documentation required by the Special Waste Permit to the transfer station operator prior to load tipping and inspection.

A. Spotting Procedures

If any of the following items are found in a load check, or spotted at any time in a regular load, on the tipping floor or in the solid waste stream, they will be immediately isolated from other waste. The hauler and generator will be determined and contacted immediately.

1. Red infectious waste bags or containers which appear to contain infectious waste without proper documentation stating that it has been properly treated
2. Sharps containers
3. Any item that appears to be infectious waste including undeclared waste and waste which does not appear to have been properly or completely treated.

2. Appropriate assessment, use of hand-tools, clean-up methods, containment, and disinfecting procedures are required at Metro facilities. Metro reserves the right to stop any clean-up actions if they are deemed unsafe by an authorized Metro representative.
3. Clean-up crews are responsible for disposing of all waste materials. Equipment and work areas shall be thoroughly decontaminated. Response personnel shall be provided with equipped with personal decontamination supplies and other required Personal Protective Equipment.
4. Hospital clean-up crews will not be permitted to respond to incidents in the disposal pit at Metro South. Metro will determine appropriate clean-up actions for items discovered in the pit.

E. Required Personal Protective Equipment (PPE)

Metro requires that clean-up personnel use the following safety equipment. The generator or contracted clean-up crew is responsible for supplying and disposing of all PPE.

1. Fluid-resistant coveralls
2. Puncture and fluid-resistant hand protection (latex and leather or butyl rubber gloves).
3. Puncture-resistant, fluid-resistant, and slip-resistant footwear
4. Hard-hat
5. Eye protection (safety glasses, goggles or mask-type respirator)
6. Mouth protection (minimum of dust mask required)

F. Tools and Equipment

Generators and contracted clean-up crews are required to supply the following tools and equipment as needed for clean-up:

1. Hand tools (tongs, shovels, broom, dustpan)
2. Red disposal bags and/or fluid-resistant containers
3. Sharps containers
4. Absorbent material or pads
5. Bleach or other disinfectant on the EPA list of disinfectants
6. Large pail for decontamination
7. Personal protective equipment
8. Personal decontamination equipment (disinfectant soap, towel, etc.)

METRO

CHAIN OF EVENTS FOR ACCEPTANCE OF MEDICAL WASTE LOADS

March 2009

This procedure is intended to clarify and coordinate responsibilities for accepting, identifying, inspection and responding to incidents of unacceptable medical waste. This document is to be used along with Metro's Medical Waste Acceptance Procedures.

- ✓ Contractor staff using protocol found in the medical waste acceptance policy inspects all medical facility loads arriving to the transfer stations.
- ✓ If unacceptable waste is found contractor must isolate the load, document generator and notify Metro Hazwaste load check lead.
- ✓ Load check lead is responsible for initial determination of contamination within the load. Helpful in this determination is the information found by contractor.
- ✓ Metro Hazwaste staff then contacts the generator for remediation, which may include one of the following choices: (it is important that both Hazwaste staff and the generators understand the operational issues with leaving piles of unacceptable waste on the tipping floor) Every effort will be made to contact the generator and remediate the load as quickly as possible. Load check program SOP's require a one hour response concerning who and when the crew will be onsite to remediate the load. It also calls for the remediation team to be on site within 2 hours.

To speed up this process, Hazwaste staff should continue to call the generator until they talk to a responsible person who has the authority to put a remediation team into action. Since contacts within each hospital may vary day to day, it is critical that the Hazwaste staff ensures that the contact understands the requirements for PPE and site access. Most suggest faxing a copy of required PPE to the contact so there full understanding of the protocols involved.

- Small amounts of unacceptable wastes- contractor may box and pack for proper disposal. (e.g. less than one quart size of bloody tubing for example)
- Larger, but still small amounts may be set-aside for the generator who should respond to pick up and remove the waste. (e.g. less than one box of bloody tubing for example)
- Still larger loads will require that the generator be contacted and sort the load for additional unacceptable waste. Protocol calls for 25% of the load to be sorted using

METRO

Environmental Services
Confined Space Policy
2000
DRAFT

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Non-Permit Confined Space

- Any space that meets the general definition of a confined space, but which does not have potential to develop atmospheric hazards.
- **Any time a Non-Permit Confined Space is entered, specific pre-entry procedures must be followed and entry authorized by a Supervisor.**

Alternative Confined Space

- Any confined space that does not generally contain known atmospheric, mechanical, electrical, or engulfment hazards, but which, under some circumstances, may develop these hazards before or during the course of entry.
- An Alternative Space Safety Plan (including atmospheric testing) is required before entry into any Alternative Confined Space.
- If the atmosphere is tested and found to be "safe", the space can be entered following the procedures of the Alternative Space Entry Plan.
- If the Alternative Confined Space is tested and found to be "unsafe", the space must be made safe before entry by following the procedures outlined in this document, or it must be upgraded to "Permit Required".

Permit Required Confined Space

Permit-required confined spaces:

- contain or have the potential to contain hazardous atmosphere
- have the potential for engulfing an entrant with material
- contain materials which pose serious safety or health hazards

Examples of permit-required spaces include: Manholes or sumps with water hazards, electrical hazards, mechanical hazards such as moving equipment, sewage (toxic, flammable), trailers containing hazardous materials, or any chemical hazards which could be present.

Hot Work, Welding and Cutting

Any time welding, cutting or other hot work is needed in a confined space, the space must be upgraded to "Alternative Space" status. Hot work in a confined space can create a hazardous atmosphere, which requires ventilation, testing, and an additional Hot Work Permit.

General Rules for Confined Spaces

<u>The following rules apply to all confined spaces</u>:

- Permit-required confined spaces (except man-holes and catch basins) must have hazardous warning signs reading: **"Danger – Permit Required Confined Space – Do Not Enter"**.

BFI Supervisor	• A person representing BFI, who is "in-charge" of transfer station operations at the site on the day the confined space is to be entered.
Emergency Rescue Team	• An emergency rescue team, equipped to enter the permit space with appropriate protective gear, is required to be standing ready at the space opening during the entry to rescue a worker in the event that the worker cannot be rescued by "non-entry" methods such as a tri-pod. The Emergency Rescue Team is only required when non-entry methods cannot be used, and when there is no alternative rescue personnel available (i.e. 9-1-1). The rescue team must be specifically trained and authorized. By pre-arrangement, the fire department may be available as the emergency rescue team.
Entry Supervisor	• An employee who is trained to ensure proper safety procedures and monitoring of the entry worker in the confined space. The entry supervisor does not enter the confined space.
Entry Worker	• An employee who is trained to enter a confined space to perform specific tasks in the space.
ERT	• Metro's Emergency Response Team – is equipped with air monitoring instrumentation and Level B Personal Protective Equipment.
Hot Work Permit	• Written authorization to perform operations (for example, riveting, welding, cutting, burning and heating) capable of providing a source of ignition. The hot work permit can be attached to the confined space entry permit.
Isolation of the Space	• The process and procedures used to remove a space from service and completely remove or control non-atmospheric hazards such as water, electricity, inflow of material, and mechanical hazards in the space.
Metro Site or Facility Supervisor	• A Metro representative (HWF Facility Supervisor, Transfer Station Operations Supervisor, Engineering or Construction Coordinator) who is "in-charge" of activities at the site on the day the confined space is to be entered.
Portable Ventilation System or Blower	• A ventilation system blowing clean air into the confined space.
Space Entry	• Entry is defined as breaking the plane of the space opening with any body part.

Procedures for Entering Non-Permit Required Confined Spaces

Entry into every confined space at Metro sites and facilities requires additional entry procedures and specific authorization by the supervisor. Some spaces contain only mechanical or electrical hazards, while some have the potential to develop hazardous atmospheres under certain conditions. Trained Metro employees and contractors may, at times, enter or supervise entry of Non-permit Required Confined Spaces.

No space shall be entered without a pre-entry assessment and authorization to ensure that the following hazards are identified and controlled or removed prior to entry:

- Engulfment
- Chemicals
- Electrical or mechanical equipment and/or hazards
- Hot work hazards
- Unsafe atmosphere
- Fire or explosion hazards
- Any other health or safety hazard

Procedures for Entering Alternative Confined Spaces

Alternative Confined Spaces are any space that could, under certain circumstances, develop atmospheric hazards such as oxygen deficiency, flammable atmosphere, or toxic gases.

Spaces in low lying areas could potentially accumulate hazardous gases due to spill or release of hazardous materials, even quite far from the source of release. Decomposition of organic materials (including trash, leaves, or oil residue) can create toxic gases (H2S), flammable gases (methane), and oxygen deficiency in confined spaces. Car and equipment exhaust can create elevated levels of carbon monoxide in confined spaces. Loaded trash trailers can contain unknown materials, organic decomposition, chemical and physical hazards, particularly if the load has been confined for a period of time or if the contents were subject to a chemical spill.

- **To ensure worker safety, every "Alternative Space" must pass an "Air Quality Test" before every entry.**

Air Quality Test

The atmosphere test (may be conducted by Metro prior to entry) must provide the following results:

- Oxygen: not below 19.5% or above 23.5%

Alternative Space Entry Plan

An Alternative Confined Space Safety Plan must be used to develop an entry plan.

A Specialist, Supervisor or trained ERT Safety Officer must authorize the Safety Plan before entry.

Entry Plan Requirements

The entry plan must include the following information:

- Site, location of the space, number, space descriptions
- Purpose of entry, tasks to be completed inside the space.
- Estimated job duration.
- Name of all entrants, attendant, and authorizing supervisor
- Initial air testing results.
- Other potential hazards in the space
- Use of ventilators or other engineering controls
- Trained entry worker(s) and attendant, operating as a buddy system.
- Equipment to be used
- Exit requirements and exit pathway
- Emergency procedures and contacts
- PPE requirements (if Level B, upgrade the space to Permit Required.
- Air monitoring documentation
- Information on any hazardous materials that will taken into the space and used (i.e. cleaners, solvents, paints, adhesives etc.)

Required Equipment

Use all of the following equipment in Alternative Confined Spaces:

- Air monitor
- Portable ventilation system
- Communication radio
- Entry Attendant
- Protective clothing, including respiratory protection as needed
- Temporary barrier

Requirements During Entry

1. Entry Supervisor must remain at the entry to the space at all times throughout the entry.

Form.

5. Provide the contractor with any information available about the space, including Metro's Confined Space Assessment and Classification Inventory.
6. Coordinate the project with Metro and BFI by ensuring that the entry permit is reviewed and approved by the Safety Analyst, signed by the BFI supervisor on site, and authorized by the Confined Space Contractor Entry Supervisor, prior to entry.
7. Verify that all required safety equipment is on-hand, that the entry permit provides for control of all known hazards, and that the entry permit specifies all procedures to be used while in the space.

Requirements Before Entry

1. Ensure that there is a barrier around the space opening that prevents inadvertent entry or falls into the space.
2. Follow all requirements for pre-entry testing listed on the Entry Permit.
3. Conduct and document air quality testing from out-side the space.

   The atmosphere test must provide the following results:

   - **Oxygen**—not below 19.5% or above 23.5%
   - **Flammable Vapors**—below 10% LFL
   - **Potential toxics** (i.e. SO2, Cl2, H2S, CO as determined by the permit)
4. If the air quality tests do not indicate a safe atmosphere, the space must be mechanically ventilated until air test levels are safe.
5. Set-up and verify operation of all safety equipment including: harness, life-line, tri-pod, winch, cellular phone, radios, ventilators, personal protective equipment, and air-monitoring equipment.
6. Ensure that the entry permit specifies procedures to be used to control non-atmospheric hazards such as water, electricity, or mechanical hazards in the space.
7. Conduct a pre-entry safety brief to ensure that all entrants and supervisor have pre-arranged communications, exit procedures, and emergency notification procedures.
8. The local fire department must be notified prior to entry whenever the entry permit or conditions on site requires Level B PPE to enter the space.

- portable ventilation system
- communication radios
- protective clothing including appropriate respiratory protection
- temporary barrier
- Immediate telephone access to emergency services through 9-1-1.

Post Entry Requirements

After all work in the space is complete, the Entry Supervisor must notify Metro and/or BFI that the work in the space is completed, that all entrants are out of the space, and that the space is appropriately marked and closed. Any hazards encountered, operations problems, or information that would assist future operations in that space should be documented and forwarded to Metro's Safety Analyst for inclusion in the Confined Space Assessment and Classification Inventory.

Employee Training

All workers on site, including contractors, must be informed of the location and hazards of confined spaces in their work areas. Employees must be aware of emergency procedures for confined space situations, and must know whom to contact for information about confined spaces at Metro sites.

Employees must be fully aware that entering confined spaces at Metro sites is prohibited unless the employee is specifically trained and authorized for that specific task.

- **Entering confined spaces without careful pre-planning is exremely dangerous, and can cause death.**

Entry Workers

Confined space entry workers must be trained in the following.

- Communicating with the entry supervisor
- Entering and exiting confined spaces
- Using the hoisting equipment (tri-pod) and body harness
- Using air sampling equipment
- Working safely in a confined space
- Determining if a confined space is permit-required or non permit-required
- Developing a confined space entry plan
- Responsibilities of the entry worker

Entry Supervisor

Confined space entry supervisors must be trained in the following:

Information on Confined Spaces at Metro

and of the Confined Space Assessment and Classification Inventory for each site. These documents can be accessed on Metro's network at:

S:\share\es\safety\worker safety plan\ 00 confined spaces

Documents included in this manual and on the network include:

- A copy of this program
- Confined Space Assessments and Classification Inventory by site
- Confined Space Entry Plan Form

Contact Sally Koch, at 797-1853, or by pager at 940-1308 for additional information regarding confined spaces at Metro REM sites and facilities.

PERMIT CONFINED SPACE - PAGE 2

Isolation: Lockout/Tagout Procedures Required - List:

Hazardous Work Safety Procedures: list

Special Requirements Space Planning Requirements/Equipment

Personal Protective Equipment Needed - List

Employee (Entrant)	**Employee (Standby)**
Employee (Entrant)	**Entry Supervisor**

Offensive Objectives	List specific tasks that will be completed in the confined space. List Task Objectives and steps needed to complete them:
Hazard Controls	**List any ENGINEERING CONTROLS that will be used to reduce hazards:** ❒ **Ventilation:** ❒ **Lock-out / Tag-out:** ❒ **Isolation of lines:** ❒ **Disconnect mechanical equipment:** **List any ADMINISTRATIVE CONTROLS or procedures that will be used to reduce hazards:** ❑ *Is a fire watch needed for this operation?* ❑ If yes, who will be assigned this duty?
Back-Up Plan	**What contingency measures are in place if something goes wrong?** (i.e. escape routes, emergency decon, spill, fire). ❒ Who should the attendant or supervisor notify in case of emergency? How will this be done?
PPE	**List the PPE to be used for this operation:** ❑ **Respiratory Protection? (If level B, Space must be upgraded to permit-required)**
Tools and Equipment	**What tools or equipment is needed to accomplish objectives and where will they be staged?**
Hot Zone Exit	**What conditions require immediate exit from the hot zone?**

METRO

Confined Spaces Entry Ops Plan

REM 2000

Site:	Location of space:	Number of space:
Date of entry:	Estimated duration of work?	Time of entry:
Name of all Entrants:	Name of Attendant:	Name of Entry Supervisor:
Purpose of entering this space?		
What will be done inside the space?		

Pre-Entry Assessment of Hazards	**List the specific hazards inside the space.** ❒ Air quality: ❒ Fire/ Explosion: ❒ Physical Hazards: ❒ Mechanical Energy: ❒ Electrical: ❒ Water: ❒ Engulfment: ❒ Chemical Contact: ❒ Hot work, welding: ❒ Other hazards:
Air Quality Testing Results:	**Test the top, middle, bottom of the space from the outside before entering. List results below.** ❒ Oxygen (O2) between 19.5 – 23.5 ❒ LEL less than 10% ❒ Specific Toxics (H2S, Cl2, CO, SO2, other) ✓ All levels are within specified safe limits? ✓ Is ventilation needed to control air quality in this space?
Defensive Objectives	**What will be done to control each of the hazards listed above:** ❒ Barrier is set up around entrance to space? ❒ Metro / BFI notified?
Offensive Objectives	List specific tasks that will be completed in the confined space. List Task Objectives and steps needed to complete them:
Hazard	**List any ENGINEERING CONTROLS that will be used to reduce hazards:**

METRO

Metro Central
Confined Space Assessment and Classification Inventory
2000

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Space: MH – 11?. Sewer discharge station, manhole access	
Location:	Located in bushes at NW corner of BFI offices
Description:	Main sewer discharge station from site. Houses test location for sewage discharge sampling.
Classification:	**Permit Required Confined Space**
Hazards:	Limited means of exit, water, hazardous atmosphere, fall
Potential Entrants:	City of Portland
Space Supervisor	BFI, *Authorization Required Before Entry*
Special Procedures:	Yes – Semi-annual testing Coffey Labs, conducts test from outside the space

Space: MH – 2,3,4,5,6,7,8,10,12,13,14,16. Sewer manhole access	
Location:	Sewer manholes are located throughout the site, see map for specific locations.
Description:	Manhole access to sewer on site.
Classification:	**Permit Required Confined Spaces**
Hazards:	Limited means of exit, water, sewage, hazardous atmosphere, fall
Potential Entrants:	No BFI or Metro entry to spaces is permitted.
Space Supervisor	BFI, *Authorization Required Before Entry*
Special Procedures:	See Permit

Space: CB – 1 through 17. Storm water drains	
Location:	Storm water drains throughout site.
Description:	Drains are covered with steel grating. Generally 4 – 8 feet deep. All storm water flows through SDS – 1, Storm Drain Shut-off station. All storm drains flow to the Willamette River.
Classification:	**Permit Required Confined Spaces**
Hazards:	Limited means of exit, water, fall
Potential Entrants:	None
Space Supervisor	BFI
Special Procedures:	Spaces may be cleaned without entering using a vacuum truck.

Space: SP – (A1, A2, B1, C1, T1): Scale Pit Access	
Location:	Located along side each scale at Scalehouse A, B, C and Trucking Scale.
Description:	Metal grate cover allows access to pit under scale. Pit is approximately 3 feet deep.
Classification:	**Alternative Confined Space**
Hazards:	Limited means of exit.
Potential Entrants:	?
Space Supervisor	BFI, *Authorization Required Before Entry*
Special Procedures:	Atmosphere test, possible ventilation needed, alternative space plan required before entry.

Space: NMS – 1 (Non-Metro Space) – Canonie valve control station	
Location:	Vault in easement near site exit (west) gate.
Description:	Access to above ground concrete vault with metal cover. No additional information available.
Classification:	**Alternative Confined Space**
Hazards:	Limited means of exit.
Potential Entrants:	Contracted by Canonie.
Space Supervisor	Canonie. BFI *Authorization Required Before Entry*
Special Procedures:	Atmosphere test, possible ventilation needed, alternative space plan required before entry.

Space: NMS – 2. ATT Phone Access Vault	
Location:	Located in driveway of transfer station loading dock, on west side of building.
Description:	ATT phone access vault.
Classification:	**Alternative Confined Space**
Hazards:	?
Potential Entrants:	ATT
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Atmosphere test, possible ventilation needed, alternative space plan required before entry.

Procedures:	Clean-out and sampling from outside of space only.

	conveyor. Pit entrance is a single ladder.
Classification:	**Alternative Confined Space**
Hazards:	Mechanical. Potential for hazardous atmosphere to develop in the event of a spill or release.
Potential Entrants:	BFI Maintenance
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Yes • Space is cleaned out by vacuum without entering. • *Lock out/ Tag –out procedures and Supervisor* Authoprization required before entry. • O2 and LEL must be confirmed acceptable prior to entry.

D. Hydraulic Fluid Tank	
Description:	Hydraulic Fluid Tank on compactor. Contains XXX gallons *hydraulic fluid. Small access hole to clean tank.*
Classification:	**Permit Required Confined Space**
Hazards:	Hazardous atmosphere
Potential Entrants:	Maintenance, cleaning
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Yes Tank is emptied and cleaned from outside access door, without entering space. Permit is required to enter the space.

Equipment: Baler	
A. Hopper	
Location:	
Description:	Feed hopper for baler
Classification:	**Non-Permit Confined Space**
Hazards:	Limited means of exit.
Potential Entrants:	?
Space Supervisor	BFI *Authorization Required Before Entry*

Equipment: Woodline	
WL-A. Cutting Hopper	
Location:	Cutting hopper for woodline
Description:	
Classification:	**Non-Permit Confined Space**
Hazards:	Limited means of exit. Moving materials, cutting blades?
Potential Entrants:	?
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Yes, BFI Lock-out
WL- B. Woodline Clean-out	
Location:	Woodline
Description:	
Classification:	**Non-Permit Confined Space**
Hazards:	Limited means of exit.
Potential Entrants:	?
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Yes, BFI Lock-out
WL – C. Separator Hopper	
Location:	Woodline
Description:	
Classification:	**Non-Permit Confined Space**
Hazards:	Limited means of exit.
Potential Entrants:	?
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Yes, BFI Lock-out
WL - D. Main Hopper	
Location	Woodline

Potential Entrants:	?
Space Supervisor	BFI *Authorization Required Before Entry*
Special Procedures:	Atmosphere test, possible ventilation needed, alternative space plan required before entry if welding or during release situation. Trailers can become oxygen deficient when loaded due to decomposition of organics inside.

METRO

Used Oil
Special Waste Management Plan
Metro Solid Waste & Recycling

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PURPOSE

This document is a standard operating procedure for the acceptance, handling, packaging, storage, disposal and releases of used oil at Metro Central and Metro South Transfer Station.

BACKGROUND

From Oregon DEQ website:

"Used oil is produced in many service and industrial activities such as auto repair, metal working, machine lubrication, refrigeration, and hydraulic equipment repair. Used oil can be recycled to make new lubricants or used as an industrial fuel when properly managed. When properly recycled, used oil is excluded from regulation as a hazardous waste. It is important that used oil be properly recycled to prevent potential pollution of the air, land, surface water, and groundwater. Used oil can contain cancer-causing agents, metal contaminants, and organic compounds that filter into the groundwater supply when the used oil is dumped or sprayed as a dust suppressant. Such contamination can result in serious hazards to human health."

Personal Protective Equipment for Spill Cleanup

- ✓ " Tyvek"
- ✓ Hard hat
- ✓ Eye protection
- ✓ Leather work boots with puncture resistant soles
- ✓ Gloves - Nitrile(inner), Supreme Nitrile(outer), leather

A spill kit is located near the used oil tank.

The area where a spill has occurred will be cordoned off by use of traffic cones or other physical barriers. Once secure, absorbent is placed over the spill until all liquid is absorbed. The area will be swept or washed to remove the contamination.

If any used oil is released to the environment, the requirements in *OAR340, Division* 142 must be followed.

DISPOSAL

Metro's contract transfer station operator is responsible for procuring pumping, transport and disposal services for used oil. Used oil transporter will be properly licensed companies, transporting the oil for energy recovery or re-refining. For each load pumped the disposal contractor provides a bill of lading indicating the weight of oil picked up, the date, and the transporter. The tank is pumped typically twice per week.

Used oil may not knowingly be disposed of with solid waste or transferred to a landfill for disposal.

METRO

Sewage Grit and Screenings Special Waste Management Plan

Metro Transfer Station Operations

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Additionally, special precautions should be taken to minimize excessive liquids delivered as part of this material. Metro will work with each generator to ensure proper preparation of this material prior to delivery.

Operational hazards may also occur during the delivery of this material. Generators should be advised concerning delivery methods/equipment. All opportunities should be taken to reduce hazards to the driver delivering this material. For instance, door bungs, and hasps should be easily accessible without the need for ladders, sticks or other devices to assist. The driver should be able to stay completely clear of the material as it is being tipped.

Recognizing these hazards and using safe work methods are the best way to prevent exposure.

SAFE HANDLING PROCEDURES

General Safety Rules

- ✓ Special caution should be taken to ensure bungs or box bolts are not loosened prior to building entry.
- ✓ Tipping should be slow and deliberate as to prevent excessive splashing of this material.
- ✓ Tipping times should be limited to reduce nuisance complaints concerning odor.
- ✓ If the material is spilled on the tipping floor, the area should be cordoned off until cleanup occurs.
- ✓ Standard issue PPE should be adequate to monitor tipping of this material.

Safety Equipment Used for Spill Cleanup

- ✓ "Super fine" absorbent, if needed
- ✓ Shovel
- ✓ Broom
- ✓ Wash down hose

Personal Protective Equipment for Spill Cleanup

- ✓ " Tyvek"
- ✓ Hard hat
- ✓ Eye protection
- ✓ Leather work boots with puncture resistant soles
- ✓ Gloves - Nitrile(inner), Supreme Nitrile(outer), leather

The area where a spill has occurred will be cordoned off by use of traffic cones or other physical barrier. Once secure, the area will be swept or washed to remove the contamination and the material will be pushed using a skid loader or shoveled into the pit for disposal.

METRO

Liquid Wastes
Special Waste Management Plan
Metro Transfer Station Operations

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Recognizing these hazards and using safe work methods are the best way to prevent exposure.

Safe Handling Procedures for Liquid Wastes

General Safety Rules

- ✓ Customers delivering this material will be advised concerning special off loading requirements- such as the product must be palletized for easy off loading, the transporter must bring a pallet jack to assist, delivery should occur during non-peak hours to allow for quicker in and out times.
- ✓ A specially designated area of each facility will be used for off loading.
- ✓ Once off loaded, the product will be staged for delivery to the tipping area.
- ✓ Traffic cones and or safety tape will be used to segregate the material and prevent salvaging.
- ✓ When an industrial lift truck is needed to off load materials, only trained and authorized personnel may operate this equipment.
- ✓ The operations supervisor will determine the rate of material added to the waste in order to ensure the liquid is absorbed prior to reloading.
- ✓ Tipping times may need to limited to reduce nuisance complaints concerning odor.
- ✓ If the material is spilled, the material will be cleaned up immediately.
- ✓ Standard issue PPE should be adequate to monitor tipping of this material.

Safety Equipment Used for Spill Cleanup

- ✓ "Super fine" absorbent, if needed
- ✓ Shovel
- ✓ Broom
- ✓ Wash down hose

Personal Protective Equipment for Spill Cleanup

- ✓ " Tyvek"
- ✓ Hard hat
- ✓ Eye protection
- ✓ Leather work boots with puncture resistant soles
- ✓ Gloves - Nitrile(inner), Supreme Nitrile(outer), leather

The area where a spill has occurred will be cordoned off by use of traffic cones or other physical barrier. Once secure, the area will be swept , washed or vactored to remove the contamination and the material will be pushed using a skid loader or shoveled into the pit for disposal.

- Entry on the spotter log concerning material received, date , time and quantities.
- Written report if any incident , accident or near miss concerning this material.

METRO

Large Dead Animal Special Waste Management Plan

Metro Transfer Station Operations

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followed to ensure the animal is accepted, handled, and reloaded as quickly as possible.

SAFE HANDLING PROCEDURES

General Safety Rules

- ✓ Customers delivering animal carcasses should be informed of potential off-loading issues prior to loading.
- ✓ Tipping should be slow and deliberate as to prevent excessive splashing of this material.
- ✓ Tipping times should be limited to reduce nuisance complaints concerning odor.
- ✓ The animal should be rolled and "buried" into the waste as quickly as possible to minimize disruption to the tipping operation.
- ✓ If the material is spilled on the tipping floor, the area should be cordoned off until cleanup occurs.
- ✓ Standard issue PPE should be adequate to monitor tipping of this material.

Safety Equipment Used for Spill Cleanup

- ✓ "Super fine" absorbent, if needed
- ✓ Shovel
- ✓ Broom
- ✓ Wash down hose

Personal Protective Equipment for Spill Cleanup

- ✓ " Tyvek"
- ✓ Hard hat
- ✓ Eye protection
- ✓ Leather work boots with puncture resistant soles
- ✓ Gloves - Nitrile(inner), Supreme Nitrile(outer), leather

The area where a spill has occurred will be cordoned off by use of traffic cones or other physical barrier. Once secure, the area will be swept or washed to remove the contamination and the material will be pushed using a skid loader or shoveled into the pit for disposal.

Proper Acceptance Procedures

Acceptance of large dead animals should be pre-scheduled to minimize disruption to the transfer station operation and customers. When a large dead animal is delivered to the facility the spotter will:

- Alert the onsite Hazmat Tech of load delivery

METRO

Fluorescent Bulbs and Lamps
Special Waste Management Plan
Metro Transfer Station Operations

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PURPOSE

This document is a standard operating procedure for the acceptance, handling, packaging, storage, and disposal related to acceptance of fluorescent bulbs and lamps at the Metro South or Central Transfer Station.

BACKGROUND

All fluorescent bulbs and lamps contain a small amount of mercury. Many varieties contain enough mercury to qualify as hazardous waste under Oregon regulations. Metro's policy is that fluorescent bulbs and lamps are allowed in trash disposed of at Metro transfer stations, but only if they are of the non-hazardous variety, or are generated by households or conditionally exempt generators (CEGS).

POTENTIAL HAZARDS OF FLUORESCENT BULBS AND LAMPS

All fluorescent lamps contain a small amount of mercury, ranging from a few milligrams in compact fluorescent bulbs (CFLs), to as much as 50 milligrams in older large fluorescent tubes. While the amount contained in each individual lamp is small, the potential cumulative amount when many bulbs are broken can be significant.

Mercury is a neurotoxin and environmental contaminant. Mercury vapor released to the atmosphere can eventually end up in surface waters, where it can accumulate in fish, which can be hazardous when consumed, especially to pregnant women and young children.

DISPOSAL

Fluorescent bulbs and lamps that have been acceptance according to the policy above will be commingled with solid waste and disposed of per standard solid waste procedures.

METRO

Covered Electronic Device/E-Waste Special Waste Management Plan

Metro Transfer Station Operations

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When improperly recycled (such as burning to release metals), highly toxic contaminants, fire retardants and heavy metals can be released into the environment. Persistent organic pollutants make up a large part of the chemical residue from improper E-Waste recycling. The long-lasting substances are known to contaminate air, soils, sediments, animals and people.

The Metro Transfer Stations act as a receiving/reloading operation to provide convenient access to recycling services. Units are not opened and care is taken to prevent breakage of units being delivered, reloaded and shipped. Special precautions should be taken to wear proper PPE while handling E-Waste. Proper lifting techniques and using the buddy system whenever possible will prevent injuries when handling these large and often unwieldy items.

Recognizing these hazards and using safe work methods are the best way to prevent exposure injury.

SAFE HANDLING PROCEDURES

General Safety Rules

- ✓ Standard issue PPE should be adequate to monitor tipping of this material.
- ✓ Assist the customer is in pulling their car or truck as closely as possible to the staging area.
- ✓ Use proper lifting techniques
- ✓ Ask for assistance from a co-worker whenever possible to lift heavy or unwieldy items
- ✓ Place computers, monitors and smaller t.v.s directly into gayloads
- ✓ Larger items should be loaded directly onto pallets for shrink wrapping prior to transport

Safety Equipment Used for Spill Cleanup

- ✓ "Super fine" absorbent, if needed
- ✓ Broom
- ✓ Pallets, gaylords, hand trucks, and forklifts if needed

Personal Protective Equipment for Spill Cleanup

- ✓ Hard hat
- ✓ Eye protection
- ✓ Leather work boots with puncture resistance soles
- ✓ Leather gloves

METRO

CFC-Containing Appliance Special Waste Management Plan

Metro Transfer Station Operations

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PURPOSE

This document is a standard operating procedure for the acceptance, handling, packaging, storage, and disposal of waste related to acceptance of CFC-containing appliances at the Metro South or Central Transfer Station.

BACKGROUND

Metro accepts household-sized appliances containing CFCs, such as refrigerators and air conditioners, at Metro transfer stations. These items are brought to a designated area for removal of CFCs and other hazardous components. The remaining appliance shell is then sent off-site for scrap metal recycling. No hazardous or recyclable components are placed in the trash.

POTENTIAL HAZARDS OF CFC-CONTAINING APPLIANCES

CFCs are gaseous refrigerants found in air conditioners, refrigerators and freezers manufactured prior to 2003, and other appliances. CFCs are potent ozone- depleting substances, and when released can deplete stratospheric ozone, which is provides important protection against ultraviolet radiation. Ultraviolet radiation can cause skin cancer, and is harmful to animals and plants.

ATTACHMENT 1- CONTRACTOR CFC REMOVAL PROCEDURE

Equipment Inspection

- Start of Shift

  Inspect condition of Recovery Unit, fan, recovery tank, hoses and gauges before starting the machine. Make sure all hoses and fittings are properly attached and all valves closed
  Inspect equipment periodically during use.
  Inspect equipment after use and make sure all valves are closed and disconnected fittings are capped.

Equipment Operation

- Preparation

  Turn the recovery tank scale to ON and allow it to warm up. Zero scale if needed.
  Place selected recovery tank onto the scale and check the displayed weight.
  Record the weight on the recovery log sheet.
  Check that the switch on the Recovery Unit is in the OFF position.
  Plug the Recovery Unit in and check that the fan is running (continuous).
  Select a refrigerator unit and locate the manufacturer data plate.
  Verify that the refrigerant is the same type as the label on the recovery tank.
  Record on the recovery log, the weight of recovery bottles and number of units recovered at the start and end of recovery period.

- Connections

  Locate the large low-pressure line on the unit compressor and carefully attach the piercing valve to the line.
  Look and listen for any sign of leaks around the piercing valve seal.
  (If seal is leaking do not draw the pressure gauge into vacuum or past zero)
  With the RED and BLUE manifold valves in the CLOSED position, attach the BLUE low-pressure hose to the piercing valve and check the gauge pressure reading.

- Recovery

  If pressure reading is at 1 psi or higher, turn the evacuator switch to the ON position.
  Open the BLUE valve on the gauge manifold.
  Open the inline valve on the RED discharge hose.
  Open the Blue valve on the recovery tank
  Monitor the pressure gauge on the manifold until it reaches 15 psi of vacuum.
  With the BLUE manifold valve OFF, check the remaining pressure and repeat the process until the pressure gauge reads zero "0"

NOTE: During cooler temperatures, it may be necessary to heat the compressor with a heat gun. Using a hammer hit the compressor housing a couple of times to help release the refrigerant from the compressor oil. This is to be done ONLY with the manifold valves closed and the Recovery Unit turned OFF. It may also be necessary to connect the RED manifold hose to the small, high-pressure line of the compressor for faster evacuation.