



## **Waste Management**

### **A. Purpose and Scope**

1. The purpose of this section is to provide contractors with information necessary to ensure environmental protection and proper management of hazardous and non-hazardous waste generated while working at NNS. This section also establishes requirements for the management of regulated waste generated at NNS and describes emergency response procedures and resources.
2. This section applies to all personnel performing the scope of operations listed above, including NNS contractors, subcontractors and NNS customers. This section covers waste management including hazardous wastes, universal waste and other regulated wastes such as asbestos and PCBs. Contractors shall obtain approval from the EH&S Department for questions concerning the requirements of this guidance document.

### **B. References and Regulations:**

1. The requirements listed in this section are taken from NNS Procedure S-1005, Requirements for Managing Hazardous Waste, and EM-1000, "The Environmental Controls Manual." These are the primary NNS references. These requirements will be updated as necessary when these references are changed.
2. Requirements in federal regulations for hazardous waste operations are located at:
  - a. 40 CFR Part 262, "Standards Applicable to Generators of Hazardous Waste"
  - b. 40 CFR 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities," Subparts C and D, "Preparedness and Prevention" and "Contingency Plan and Emergency Procedures"
  - c. 49 CFR Department of Transportation, Parts 171, 172, 173, 177, 178
  - d. 49 CFR Part 273, "Standards for Universal Waste Management"
  - e. 29 CFR 1910.1200, "Hazard Communication."
  - f. 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response," paragraph (p), "Certain Operations Conducted Under the Resource Conservation and Recovery Act of 1976 (RCRA)" and
  - g. 40 CFR 273 Standards for Universal Waste Management.



3. Requirements in Virginia regulations for hazardous and solid waste operations are at:
  - a. 9VAC 20-60-et seq., "Virginia Hazardous Waste Management Regulations"
  - b. 9VAC 20-80-eq seq., "Virginia Solid Waste Management Regulations"
  - c. 9VAC20-60-273 "Adoption of 40 CFR Part 273 by Reference"

### **C. Waste Management Information Sessions**

1. Contractors generating or managing waste at NNS shall attend annual training on waste management, as required by Reference b.1, provided by their employer. The training should focus on proper waste management practices, such as, but not limited to the following:
  - a. Proper waste handling and container storage requirements
  - b. Proper container labeling
  - c. Emergency response information and spill notification
  - d. Daily requirements for blasting operations
  - e. Requirements for paint mixing operations
2. Contractor personnel required to attend include:
  - a. Health & Safety Officers
  - b. On-site Project Managers
  - c. Designated personnel that would be responsible for managing a waste area
  - d. Contractor operations generating waste at NNS must be managed in accordance with this section and with EM-1000, "Environmental Controls Manual."
3. Contractors are utilized by NNS facilities, ship repair and overhaul operations, and new construction operations for projects throughout the shipyard. Waste (other than garbage and refuse) must be tested or identified using process knowledge to determine any hazardous waste characteristics are present. Wastes requiring testing or hazardous waste evaluation include, but are not limited to the following:
  - a. Spent abrasives



- b. Demolition/construction debris
  - c. Operations generating paint debris
  - d. Operations generating oily debris
  - e. Excavated soils and/or debris
  - f. Rags used in degreasing/painting operations
  - g. Rags/debris generated from lead operations
4. Contractors working in the yard may encounter waste materials that must be managed properly for disposal. Such waste items include:
- a. Fluorescent light ballasts which may contain Polychlorinated Biphenyls (PCBs)
  - b. Fluorescent and Mercury light bulbs must be managed as Universal Waste.
  - c. Used batteries containing lead, nickel, or cadmium must be managed as Universal Waste.
  - d. Partially used paint buckets and aerosol cans.
  - e. Construction debris possibly containing asbestos materials

#### **D. Hazardous Waste Generator Requirements**

1. Responsibility: Contractors generating hazardous waste shall manage it according to the requirements listed in this section and references b. (1). - (6), and c- (1) listed above.
  - a. All hazardous waste generated by the proper performance of work packages, scope of work, etc. will be disposed of by NNS using NNS' EPA ID number.
2. Hazardous waste generated that is not associated with contracted work or a scope of work, such as abandoned or material left behind, shall be disposed of using NNS's EPA ID number, but shall be the financial responsibility of the contractor.
3. Improper handling or disposal of hazardous waste and hazardous materials is a breach of contract and can lead to possible suspension from the yard or contract termination.
4. Notify EH&S if this results in conflicting regulatory or NNS requirements.



5. Identification of hazardous waste: Contractors shall contact the Environmental Engineering section of EH&S prior to generating suspect hazardous waste. Environmental Engineering shall identify whether or not a waste is a hazardous waste and provide guidance as requested. Be prepared to provide the following information about the waste:
  - a. Description of the process generating the waste.
  - b. Provide name of the materials and MSDS used in the process.
  - c. Description of the waste (e.g. physical state, odor, and/or color).
  - d. Amount expected to be generated.
  - e. Container used, or expected to be used.
6. Generating waste: Contractors shall notify EH&S when hazardous waste or waste hazardous material will be generated or if the composition of an existing waste changes, or if the process generating a waste changes.
  - a. Notify EH&S when planning and/or scheduling an operation which could generate hazardous waste.
  - b. Determine the composition of hazardous waste based on the materials used in the operation and type of operation. This information will be used by EH&S to determine the hazards associated with the waste and the appropriate handling precautions.
  - c. Establish handling precautions before starting an operation which could generate a hazardous waste.

## **E. Packaging Requirements**

1. Contractors generating hazardous and/or non-hazardous waste shall manage, package, and label the waste containers in accordance with the following:
  - a. Container Size: Package waste material in a 55-gallon drum. Smaller containers and bulk waste containers shall be approved by EH&S.
  - b. Container Material: Ensure the waste is compatible with the container material. For example, do not package waste that dissolves plastic in a plastic drum or a corrosive liquid in a mild steel drum.
  - c. Leaks: Correct leaking containers immediately. Transfer the waste material into another container or overpack the entire container.



- d. Reusing Original Container: Package waste in its original container when possible. If this is not practical, package it in a new DOT-approved container. Do not package hazardous/non-hazardous waste in a severely rusted or dented container. Do not use containers that have crane-lift holes drilled in the sides.
- e. New Container: Use the following DOT-approved containers for packaging waste if the original container is unacceptable:
  - 1) NNPN 3703406 (Bolt and Ring Top)
  - 2) NNPN 3703410 (Bung Top)
  - 3) NNPN 3703403 (Plastic Lined)
  - 4) NNPN 3703405 (85-gallon overpack)
- f. Labels:
  - 1) Label all waste containers prior to generating waste with one of the following:
    - a) Waste Label (form NN4651 NNPN 3321836) for non-hazardous wastes (see Appendix H)
    - b) Hazardous Waste Label (form NN7029 NNPN 15278621)
    - c) Universal Waste Light Bulbs (form NN7067 NNPN 16575967)
    - d) Universal Waste Batteries (form NN7068 NNPN 16575958)
  - 2) Use a permanent marker prior to adding waste to the container and provide all information requested on that label including where to ship the waste.
  - 3) Remove or paint out any old or inapplicable markings or labels. A paint stick or paint tube may be used to temporarily label containers. However, containers shall be permanently labeled prior to being transported by the Onsite Hazardous Waste Contractor (OHWC).
  - 4) Contact your Contract Coordinator or the OHWC for waste labels. Unlabeled or misidentified waste containers must be managed as suspect hazardous waste. Mislabeling waste containers can delay production schedules and require expensive testing procedures.
- g. Keep Containers SEALED



- 1) Only open containers when either adding or removing waste.
  - 2) Ensure all tops and lids have bung tops and ring/bolts.
  - 3) All removable lids must have ring “gaskets.”
  - 4) All tops must be secured and non-leaking. Containers missing tops/lids and closed by poly sheeting taped to the container are unacceptable.
- h. Line the drum exterior. Contractors generating paint and thinner waste must line the exterior of the 55-gallon drums with poly or stretch wrap. This eliminates excess waste on the exterior of drums and reduces overpack costs.
- i. Empty Paint Buckets: Used, empty paint buckets must be managed in an orderly fashion to prevent accumulation of excess buckets and reduce the chance of spills.
- 1) Partially used buckets must be closed when not in use or under direct supervision of the user.
  - 2) Used (empty) buckets must be placed upside down on a pallet that has been covered with poly or cardboard.
  - 3) Punch holes in the bottom of the buckets to allow air flow and further drying
  - 4) Stack up to 6 buckets upside down on the pallet.
  - 5) Cover the buckets with poly and secure with tape.
  - 6) Secure load to pallet.
  - 7) Contact transportation and ship the empty buckets to Stop 550. Refer to Section III. C. “Liquid Waste and Water Pollution Prevention” in this manual for further information on proper container handling and spill prevention.

## **F. Onsite Management of Universal Waste Batteries**

1. Storage of Universal Waste Batteries:
  - a. Universal waste batteries shall be stored in EE approved <90 day Hazardous Waste Accumulation Areas (HWAA).



- b. Workers shall label all universal waste battery containers with the Universal Waste Label as described in this section, 5.f
- c. Workers shall tape battery terminals with electrical tape before placing the battery into the universal waste container or drum.
- d. Universal waste shall be picked up by the OHWC within 70 days of the accumulation start date.
- e. Refer to Section 3 of EM-1000 for HWAA requirements.

NOTE: "Onsite" means the same or geographically contiguous property, including the scrap yard and paint warehouse across Warwick Blvd.

2. Transporting Universal Waste Batteries:

- a. Universal waste batteries shall only be transported by Universal Waste Handlers to the EE approved HWAA.
- b. Only the OHWC is approved to transport Universal Waste Batteries from HWAA's to Stop 788.

3. Disposal of Universal Waste Batteries By the Onsite Hazardous Waste Contactor (OHWC):

- a. The OHWC transports universal waste from HWAA's to Stop788 for shipment and final disposition out of the shipyard.
- b. Universal waste batteries shall be recycled by the Onsite hazardous Waste Contractor (OHWC).

**G. Onsite Management of Universal Waste Light Bulbs**

1. Storage of Universal Waste Light Bulbs:

- a. Universal waste light bulbs must be stored in EE approved <90 day Hazardous Waste Accumulation Areas (HWAA).
- b. Waste light bulbs shall be boxed in original boxes or an equivalent sized box, labeled in accordance to Part Two, C of this section and stored out of the weather.

Note: Do not tape bulbs together.



- c. Broken bulbs shall be bagged and stored in a 55 gallon drum or other EE approved container. Refer to Q-1043 Mercury Control Manual for proper handling of broken bulbs.
- d. Ballast waste from light bulb removal:
  - 1) Ballasts marked with "No PCBs" or a known manufacture date after 1998 shall be labeled, stored, and disposed of as non-hazardous, non-PCB waste referenced in Section 3 of EM-1000.
  - 2) Ballasts removed from light fixtures, either with an unknown manufacture date and not marked "No PCBs" shall be labeled, stored and disposed of as PCB Ballasts per Section 4 of EM-1000.
- 2. Transporting Universal Waste Light bulbs
  - a. Only the OHWC is approved to transport universal waste light bulbs from HWAAs to Stop 788.
- 3. Disposal of Universal Waste Light Bulbs by the OHWC
  - a. Universal waste light bulbs shall be disposed of by the Onsite Hazardous Waste Contractor (OHWC).
  - b. The OHWC transports universal waste from HWAAs to Stop788 for shipment and final disposition for recycling.
- 4. Offsite Management of Universal Waste Batteries and Bulbs
  - a. Contact Environmental Engineering (O27) 8-5523, if generating Universal Waste offsite.

## **H. Accumulation Waste Area Types/Dating Requirements**

- 1. Satellite Accumulation Area (SAA):
  - a. A total of 55 gallons of waste may be accumulated in this area.
  - b. Once container is full or the project is completed, date the label and call OHWC to pick up waste within 72 hours. See Section 5.f. for additional requirements.
  - c. Post each SAA with a "SAA" sign (provided by O27).



- d. Establish your SAAs within "line of sight" of the waste generation so it is always under the control of the operator.
2. <90 Day Hazardous Waste Accumulation Area (HWAA) - Bulk Waste Accumulation Area Requirements
    - a. Responsibility: A contractor that accumulates more than 55 gallons of a hazardous waste for more than 72 hours shall manage that waste according to requirements listed in sections 2 and 4 of this part (pages 1 and 3). The contractors requiring bulk storage will coordinate all storage and shipments with the OHWC. NNS is not permitted to store hazardous waste longer than 90 days.
    - b. Facility Description: Bulk waste accumulation areas are used to accumulate large amounts of hazardous waste. These areas utilize large roll-off boxes as the bulk hazardous waste container.
    - c. Closed Container: Contractors shall keep the bulk container closed, except when it is necessary to add or remove hazardous waste.
    - d. Container liners: Contractors storing/disposing of hazardous waste shall line each rolloff with a liner prior to adding waste to the rolloff.
    - e. Mixing Waste: Ensure that hazardous waste is approved by EH&S or the OHWC before placing it into the container. Bulk waste containers are used for only one type of waste approved by the disposal site.
    - f. Labeling: Hazardous waste must be on these waste containers and the date that waste is first placed into the rolloff container. See Section 5.f. for additional requirements.
    - g. Weekly Inspection: Inspect and inventory the container(s) daily. Notify EH&S and the OHWC immediately if the container begins deteriorating or if there is any evidence of leakage.
    - h. Accumulation Time Limit: Ensure the container is shipped off-site within 90 days. Notify the OHWC to remove waste by the 70th day of the container date. The OHWC can be reached at 688-7804.
    - i. Post the area with a "HWAA" sign (provided by O27)
    - j. Keep a spill kit and fire extinguisher in the area at all times.
  3. The OHWC will conduct and document weekly inspections for all HWAAs.



**I. Requirements for Both Areas:**

1. Must be established and approved by the Environmental Engineering (EE) section of EH&S before generation of waste. This includes areas that need to be moved to a new location.
2. All hazardous waste areas must have a sign posted, which will be provided by EE.
3. Once a project ends, the area must be closed. Signs must be returned to EE within 24 hours of closing site.
4. Label all containers in accordance with 5.f. of this section.
5. Container Material: Ensure hazardous waste is compatible with the container material before accepting waste into the area.
6. Use containers in good condition. Keep containers closed/sealed and upright unless adding or removing waste. A sealed container means that bungs and lids are closed tightly and lid gaskets are in place.
7. Segregate waste streams, such as, aerosol cans, oil/grease, solid and wet paint, and batteries (tape the terminals on lead acid and NiCad batteries).

**J. Vacuum Cleaner Requirements**

1. Vacuum cleaners must be managed in accordance with Y-1099.
2. Contact O27 for the proper management of your vacuum cleaner.

**K. Rad Source Instrumentation Use Requirements**

Personnel needing to bring in instruments with licensed quantities of a radiological source must contact EE at least two days prior to entering the yard. Contractors must receive approval for bringing in instruments containing licensed radiological quantities in the yard.

**L. Transportation Requirements**

1. Hazardous waste transportation: Notify the OHWC at 688-7804 to arrange for transportation of hazardous waste from the worksite to a 90-day accumulation area or the Chemical Waste Treatment Plant (CWTP).
2. Generators as transporters: Contractors shall not transport hazardous waste to a 90-day accumulation area or the CWTP.



3. Material Receipt: Sign the Waste Material Transfer form (provided by the OHWC) for each type of hazardous waste being transported to a 90-day accumulation area or the CWTP. The OHWC will fill out the form and provide the contractor with a copy.
4. Non-hazardous waste transportation: Materials designated to be non-hazardous shall be transported to Stop 550. Contractors and/or Contract Coordinators shall package the waste in accordance with this section and contact the Transportation Department (O54) at 0-3113 to arrange for transportation to Stop 550.

### **M. Waste Spill Response**

1. Contractors are responsible for preventing and controlling spills to the best of their ability. Contractors are responsible to have spill cleanup materials such as spill pads and absorbent on hand when working with hazardous waste and hazardous materials.
2. Initial Notification: In the event of a hazardous material emergency or incident involving hazardous waste, personnel shall Call \*911, 0-2222 or 380-2222 for cell phones.
3. All materials brought into the shipyard must be approved for use by EH&S. Potentially hazardous materials used at NNS have a Material Safety Data Sheet (MSDS) on file. A computer program containing these MSDSs is maintained by the EH&S Department to allow rapid access and identification of the material's chemical composition and hazards. The program also provides spill clean up and first aid instructions.
4. The shipyard developed "Best Management Practices" to prevent materials from reaching storm drains, industrial drains, and releases to the river. For further information regarding a hazardous waste spill refer to Section III.C; "Liquid Waste and Water Pollution Prevention."
5. Spills resulting in fines, violations and/or penalties caused by the actions of a contractor shall be the responsibility of the contractor.