



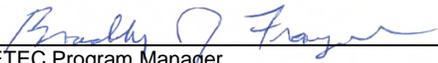
WMP-10784

Waste Management Plan

**Energy Technology Engineering Center
Santa Susana Field Laboratory
Simi Valley, CA**

Revision 0-B

Approved:



ETEC Program Manager

06/09/15

Date

CONTENTS

DEFINITIONS.....	4
ACRONYMS.....	5
1. PURPOSE.....	7
2. SCOPE.....	7
3. RESPONSIBILITIES.....	9
3.1 Program Manager.....	9
3.2 Environment, Safety, Health and Quality Manager.....	9
3.3 Facility Manager.....	9
3.4 Waste Management Specialist.....	10
3.5 General Responsibilities - All Staff.....	10
4. NON-D&D WASTE PROCESS.....	11
4.1 Regulatory Drivers.....	11
4.2 Hazardous Waste Generator Requirements.....	12
4.3 Training.....	12
4.4 Regulatory Classification of Wastes.....	13
4.5 Waste Determination.....	15
4.6 Site Waste Streams.....	16
4.7 Pollution Prevention/Waste Minimization Practices.....	18
4.8 Tanks and Containers.....	18
4.8.1 Tank or Container Selection.....	18
4.8.2 Labeling.....	19
4.9 Waste Accumulation and Storage.....	19
4.9.1 Inventory Control.....	19
4.9.2 Inspections.....	20
4.10 Wastewater Management.....	21
4.11 Transport and Off-Site Disposition of non-D&D Wastes.....	21
4.11.1 Shipping Documents and Recordkeeping.....	21
4.11.2 Non-Conforming Shipments.....	
5. RECORDS.....	22
6. REFERENCES.....	22
APPENDIX A DTSC Hazardous Waste Generator Requirement.....	24
APPENDIX B DOE / ETEC Transportation Plan.....	33

DEFINITIONS

<i>Asbestos-Containing Material</i>	Material containing more than one percent asbestos.
<i>Environmental Media</i>	Soil, sediment, groundwater, and surface water.
<i>Extremely Hazardous Wastes</i>	Wastes regulated by DTSC based on a number or criteria listed in the regulation (22 CCR §66261.107).
<i>Hazardous Waste</i>	Solid waste that meets the criteria in 40 <i>CFR</i> §261.3.
<i>Investigation-Derived Waste</i>	Material generated during Environmental Monitoring activities that requires management and disposition as waste.
<i>Legacy Waste</i>	A backlog of stored waste remaining from former ETEC operations, about which a permanent disposal determination remains to be made.
<i>Low-Level Radioactive Waste</i>	Radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste (TRU), spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act (AEA), as amended.
<i>Low Level Mixed Waste</i>	LLRW that also contains RCRA and/or Non-RCRA hazardous waste.
<i>Non-RCRA Hazardous Waste</i>	Waste that is hazardous under California law and regulation (22 CCR 66261.24) but not under RCRA.
<i>Polychlorinated Biphenyl (PCB)-Contaminated</i>	A nonliquid material containing PCBs at concentrations ≥ 50 ppm but < 500 ppm; a liquid material containing PCBs at concentrations ≥ 50 ppm but < 500 ppm or where insufficient liquid material is available for analysis; a nonporous surface having a surface concentration $> 10 \mu\text{g}/100 \text{ cm}^2$ but $< 100 \mu\text{g}/100 \text{ cm}^2$, measured by a standard wipe test as defined in § 761.123, Toxic Substance Control Act (TSCA) waste.
<i>Resource Conservation and Recovery Act (RCRA)</i>	The primary federal law (42 U.S.C. §6901, <i>et seq.</i>) in the United States governing the disposal of solid waste and hazardous waste. RCRA was first enacted in 1976 with amendments in 1984, 1992 and 1996.
<i>Transuranic (TRU) Waste</i>	Waste that contains transuranic (atomic number > 92) alpha-emitting nuclides at concentrations $> 100 \text{ nCi/g}$ with half-life > 20 years.

ACRONYMS

ACM	Asbestos-Containing Material
AEA	Atomic Energy Act
AOC	Administrative Order on Consent
CCR	California Code of Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
D&D	Decontamination & Demolition
DOE	Department of Energy
DTSC	California Department of Toxic Substances Control
ESH&Q	Environmental, Safety, Health, & Quality Manager
ETEC	Energy Technology Engineering Center
HSC	California Health and Safety Code
IDW	Investigation Derived Waste
ISMS	Integrated Safety Management System
LLRW	Low-Level Radioactive Waste
LLMW	Low-Level Mixed Waste
North Wind	North Wind, Inc.
PCB	Polychlorinated Biphenyls
PM	Program Manager
RCRA	Resource Conservation and Recovery Act
RMHF	Radioactive Materials Handling Facility
S&M	Surveillance & Maintenance
SAA	Satellite Accumulation Area
SPCC	Satellite Accumulation Area

SWPPP	Storm Water Pollution Prevention Plan
T&D	Transportation & Disposal
TRU	Transuranic
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage or Disposal Facility
WAC	Waste Acceptance Criteria
WMP	Waste Management Plan
WMS	Waste Management Specialist

DRAFT

1. PURPOSE

This document describes the Non-D&D Waste Management Plan (WMP) that North Wind, Inc. (North Wind) has prepared for the Energy Technology Engineering Center (ETEC) Environmental Monitoring and Decontamination and Demolition (D&D) contract for work authorized by the Department of Energy (DOE) Office of Environmental Management Consolidated Business Center as defined by Contract DE-EM0000837 Task Orders and modifications hereafter collectively referred to as the Contract.

This WMP provides an overall strategy for and systematic approach to the management of wastes generated under the non-D&D portion of the Contract in a manner that is protective of worker health and safety, the public, and the environment and is fully compliant with all applicable state and federal environmental laws and regulations and DOE orders.

2. SCOPE

This Non-D&D Waste Management Plan will be implemented during Environmental Monitoring, Surveillance and Maintenance (S&M), Facility Maintenance and Infrastructure Support and Project Support activities at ETEC. The primary activities included in this scope of work are:

1. Groundwater Management at Building 4024 (CLIN 00002);
2. Groundwater Monitoring Activities (CLIN 00003);
3. General Environmental Monitoring, S&M Activities, Non-D&D Waste Management Activities, Project Support (CLIN 00004).

The WMP is intended to provide requirements and guidance to project staff. It is incumbent upon the Program Manager (PM) to ensure that North Wind, its subcontractors and consultants comply with all applicable federal, state and local regulatory requirements. The PM must also ensure that these requirements are passed down through subcontracts to all companies performing work for North Wind at the ETEC site.

Specifically, this WMP addresses:

- Organization and Responsibilities (§3)
- Regulatory Drivers (§4.1)
- Hazardous Waste Generator Requirements (§4.2)
- Required Training (§4.3)
- Regulatory Classification of Wastes (§4.4)
- Waste Determination (§4.5)

- Non-D&D Waste Streams (§4.6)
- Pollution Prevention/Waste Minimization (P2/WM, §4.7)
- Tanks and Containers (§4.8)
- Waste Accumulation and Storage (§4.9)
- Wastewater Management (§4.10)
- Transportation and Off-Site Disposition of Non-D&D Wastes (§4.11)
- Records and Recordkeeping (§5)

Waste streams that are expected to be encountered during the non-D&D portion of the work (and therefore subject to this plan) are summarized in Table 2.1. Additional information is provided in Table 4.1.

Table 2.1 Anticipated Non-D&D Waste Streams

Activity	Waste	Estimated Annual Volume
Investigation-Derived Waste (IDW)	Purge and decontamination water from groundwater monitoring	< 300 gallons
	Personal protective equipment, plastic sheeting	< 0.5 cubic yards ¹
	Tritium-contaminated groundwater	< 100 gallons
Groundwater Infiltration (Bldg. 4024)	Groundwater	< 60,000 gal
S&M, Facility Maintenance & Project Support	Lamps, switches, etc.	< 0.25 cubic yards
	Ballasts, etc.	< 0.25 cubic yards
	Used oil	
	Swipes, quality control samples, PPE, paper towels, smears, air filters, etc.	< 0.25 cubic yards
Legacy Waste	TBD	TBD

3. RESPONSIBILITIES

In carrying out the scope of this WMP (see §§2, 4, and 5) functional management, line management, and workers carry out the respective roles and responsibilities listed in this section. Each individual or group is responsible for performing quality work safely, securely, efficiently, and in an environmentally responsible manner. Key positions descriptions, under this WMP, can be found in Section 3.1 through Section 3.5.

3.1 Program Manager

North Wind is ultimately responsible the effective implementation of this Waste Management Plan at the ETEC site. The North Wind PM is responsible for promoting and ensuring the WMP is followed at all levels of work planning and implementation, and for ensuring the plan is appropriately revised in response to unanticipated or changing conditions and “lessons learned.”

3.2 Environment, Safety, Health and Quality Manager

The Environment, Safety, Health and Quality (ESH&Q) Manager is to serve as the primary focal point for safety, health and environmental issues. The ESH&Q Manager’s primary role is to proactively implement company policies and the necessary employee training to ensure compliance with applicable regulatory requirements on matters of environment, health and safety management, including the requirements of this WMP.

3.3 Facility Manager

The Facility Manager will manage environmental monitoring, S&M, non-D&D waste management and project support activities. The Facility Manager will also maintain the project site in compliance with regulatory and contract requirements. Additional Facility Manager activities related to waste management will include:

- Host daily ESH&Q briefings,
- Manage activities related to Building 4024,
- Coordinate with the waste management specialist to handle, store, transport, and dispose of the site waste streams,
- Coordinate records, sample and data management, and quality assurance activities to support site activities,
- Assist DOE with regulatory agencies in connection with the management of all waste types present or generated at ETEC,
- Make any required emergency notifications to DOE and, at DOE’s direction, the relevant regulatory agencies in a timely manner,

- Coordinate an appropriate response in the event of an emergency, and
- In coordination with the Waste Management Specialist, conduct any necessary surveillance or assessments of the waste management program; interface with atment, Storage or Disposal Facility (TSDFs) on waste characterization, waste acceptance criteria (WAC), disposal certifications, and any issues relating to non-conforming shipments.

3.4 Waste Management Specialist

The Waste Management Specialist (WMS), or designee, is responsible for implementation of this WMP. For the purposes of this WMP, the WMS will report to the PM and work in close coordination with the Facility Manager. The WMS responsibilities include:

- Waste management operations and disposition including waste generation, tracking, storage, Transportation & Disposal (T&D), and records management and reporting,
- Waste planning to identify, quantify and plan for disposition of waste before it is generated,
- In coordination with the Facility Manager, conduct any necessary surveillance or assessments of the waste management program; interface with TSDFs on waste characterization, waste acceptance criteria (WAC), disposal certifications, and any issues regarding non-conforming shipments,
- Accountability for compliance with transportation and disposal requirements,
- Oversight of and coordination with North Wind and contractor staff during characterization, profiling, manifesting, segregation, packaging and disposal and certification of disposal, and
- Assist DOE with regulatory agencies in connection with the management of all waste types present or generated at ETEC.

3.5 General Responsibilities - All Staff

North Wind employees, subcontractor personnel, consultants, and vendors are responsible for:

- Working in accordance with the WMP, waste procedures and specific responsibilities as defined in project work documents,
- Reporting problems or deviations associated with waste management issues and the WMP, and
- Providing feedback to supervisors and management to assist in promoting continuous improvement of the work process.

4. NON-D&D WASTE PROCESS

4.1 Regulatory Drivers

This WMP provides a framework within which all non-D&D waste management activities performed by North Wind and its subcontractors will be carried out in full compliance with all applicable federal, state, and local environmental statutes and regulations, and DOE Orders and policies including:

- Resource Conservation and Recovery Act (RCRA), 42 USC §6901 *et seq.*
- Title 40 Code of Federal Regulations (40 CFR), Chapter I, Subchapter I (regarding solid waste; and in particular, Parts 260 – 282 regarding hazardous waste, universal waste, and used oil)
- 40 CFR Part 243 regarding guidelines for the storage and collection of residential, commercial, and industrial solid waste
- 40 CFR Part 761 regarding polychlorinated biphenyls (PCBs)
- 29 CFR 1910 Occupational Safety and Health Standards
- Title 49 CFR, Part 172, *et seq.*, regarding requirements for packaging, marking, labeling, and transporting hazardous materials on public roadways
- 49 CFR Part 173 Shippers – General Requirements for Shipments and Packaging’s
- 49 CFR Part 174 Carriage by Rail
- 49 CFR Part 177 Carriage by Public Highway
- 49 CFR Part 178 Specifications For Packaging
- 49 CFR 180 Continuing qualification and maintenance of packaging
- California Health and Safety Code (HSC), Division 20, Chapter 6.5, Hazardous Waste Control Law
- California Code of Regulations (CCR), Division 4.5, Title 22, regarding California’s hazardous waste management regulations
- 2010 Administrative Order on Consent (AOC) between DOE and California Department of Toxic Substances Control (DTSC)
- DOE Order 435.1, Radioactive Waste Management

- DOE Manual 435.1, Radioactive Waste Management Manual
- DOE Order 436.1 Departmental Sustainability.
- Executive Order 13423 Strengthening Federal Environmental, Energy, Transportation Management.
- Executive Order 13693 Planning for Federal Sustainability in the Next Decade
- DEAR 970.5223-1, Integration of Environment, Safety and Health into Work Planning and Execution.

4.2 Hazardous Waste Generator Requirements

Radioactive wastes are not expected to be generated during non-D&D activities (see Section 4.5). As a result, the primary regulatory focus of this WMP involves compliance with state and federal hazardous waste regulations. California is authorized to implement the federal regulations under RCRA. The California Environmental Protection Agency, DTSC, and several local enforcement agencies, have primary responsibility for enforcing California's requirements applicable to hazardous waste generators.

A summary of California's hazardous waste generator requirements is provided in Appendix A. Those requirements are reflected throughout this WMP.

4.3 Training

Employees with responsibility under this WMP, regardless of their capacity, will be trained at a level commensurate to their duties. Training will address the requirements of this Plan, including specifically:

- Hazardous Waste Generator training is required annually per 22 CCR §66265.16 and applies to anyone who handles, generates, packages, or labels hazardous waste.
- Universal Waste training is required pursuant to 22 CCR §66273.36 for all employees involved with handling, packaging, storing, labeling, or responding to releases of universal waste.
- Radioactive Waste management personnel will participate in training that meets the requirements of DOE Order 360.1C, *Federal Employee Training*, DOE M 435.1, *Radioactive Waste Management Manual*, and ISMS-10784, *Integrated Safety Management System* (ISMS).
- Personnel involved in coordinating the off-site disposition of wastes will receive training on the Waste Acceptance Criteria for the various off-site TSDFs, as appropriate.

Training records will be maintained for all employees in accordance with QAP-10784-171, *Records Management*.

4.4 Regulatory Classification of Wastes

The regulatory drivers discussed in Section 4.1 together create the following broad waste classifications:

- Solid Wastes – Any material that is discarded, abandoned, recycled, or considered “inherently waste-like” (22 CCR §66261.2). Hazardous waste is a subset of solid waste.
- General Trash – Non-hazardous waste that meet the waste acceptance criteria for treatment or disposal in a sanitary landfill.
- RCRA Hazardous Wastes – Wastes which are regulated as hazardous wastes under RCRA and the attendant regulations at 40 CFR Part 260, *et seq.* RCRA Hazardous Wastes include:
 - Characteristic Wastes – These are wastes that display one or more of the four hazard criteria of ignitability, corrosivity, reactivity, or toxicity (22 CCR §66261.20-24).
 - Listed Wastes – These are wastes which fall within one of three categories of wastes which are specifically listed by EPA as hazardous. The categories include wastes from specific sources (e.g., industrial processes), wastes from non-specific sources, and discarded commercial chemical products (22 CCR §66261.30-35).
- Non-RCRA California Hazardous Wastes – The State of California, through the California EPA and the DTSC, also regulates as hazardous certain wastes that are not covered by RCRA. These are referred to as Non-RCRA Hazardous Wastes (22 CCR 66261.24).
- Extremely Hazardous Wastes, as defined in 22 CCR §66261.107, are regulated by DTSC based on a number or criteria listed in the regulation.
- PCB Waste – PCB wastes regulated under the Toxic Substances Control Act (TSCA) include the following:
 - PCB Articles – Capacitors, transformers, electric motors, pumps, and pipes are regulated if the liquid or potting material contains PCBs at concentrations equal to or greater than 50 ppm.
 - PCB Bulk Product Waste – This waste category includes plastics, wire insulation, molded rubber parts, applied dried paints, adhesives, and fluorescent light ballasts if PCB concentrations in the coating/plastic/potting material are equal to or greater than 50 ppm.

- Universal Wastes. – A waste that meets the definition of hazardous waste but that EPA has determined pose a lower risk to human health and the environment than other hazardous wastes. The universal waste regulations allow these wastes to be managed in a less stringent manner than other hazardous wastes. Examples of universal wastes include:
 - Mercury containing devices
 - Batteries
 - Lamps
 - Non-empty aerosol cans
 - Pressure or vacuum gauges that contain mercury
 - Certain consumer electronics
- Low-Level Radioactive Waste (LLRW) – Radioactive waste containing source, special nuclear, or byproduct material and which is not classified as high-level radioactive waste, transuranic waste (TRU), spent nuclear fuel, or byproduct material as defined in §11e.(2) of the Atomic Energy Act (AEA).
- Low-Level Mixed Wastes (LLMW) – LLRW that also contains RCRA and/or Non-RCRA hazardous waste.
- TSCA-Regulated LLRW – Low-level waste containing PCBs, asbestos, or other such toxic components regulated under TSCA. Such wastes must be managed in accordance with requirements derived from the Toxic Substances Control Act, as amended, and DOE O 435.1.
- High-Level Radioactive Wastes - Highly radioactive waste material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and other highly radioactive material that is determined, consistent with existing law, to require permanent isolation.
- Transuranic (TRU) Wastes – Waste that contains transuranic (atomic number > 92) alpha-emitting nuclides at concentrations >100 nCi/g with a half-life > 20 years.
- Classified Wastes – Wastes that due to their composition, structure, or function reveal restricted data or other classified information, either directly or through analysis, in accordance with DOE Classification Guide CG-SS-4 or other applicable classification guidance.
- Used Oil - Any oil refined from crude oil or any synthetic oil that has been used and because of such use is contaminated by physical or chemical impurities. This includes lubricants, coolants, emulsions, etc. It does not include oil-based products used as solvents refined from crude oil or manufactured from synthetic materials. If recycled

pursuant to 40 CFR § 279 and HSC 25250.1, used oil is exempted from hazardous waste management requirements. (40 CFR 279 and HSC 25250.4)

- Asbestos-Containing Material (ACM) – Material containing more than 1% asbestos.

The following classes of waste are not expected to be generated within the scope of this WMP: extremely hazardous waste, PCB waste, LLRW, LLMW, TSCA-regulated LLRW, high-level radioactive waste, TRU waste, classified waste, ACM and non-RCRA hazardous waste. General trash is not addressed by this WMP.

4.5 Waste Determination

The waste-generating activities covered by this WMP involve established, ongoing tasks at ETEC, and the characteristics of the wastes are well known (See Section 4.6). As such, process (i.e., generator) knowledge is adequate to classify the wastes that are expected to be routinely generated and managed under the WMP. Should unexpected wastes be encountered, the waste determination process recommended by DTSC's online course "California Hazardous Waste Classification" (http://ccelearn.csus.edu/waste/class/intro/intro_01.html) may be adapted to the unique circumstances at the ETEC facility. Specifically, the waste determination process will be based on answering the following questions:

1. Is the material a waste?
2. Is the waste excluded or exempted under the applicable regulations?
3. Is the waste radioactive?
4. It is listed as a hazardous waste?
5. Is it listed under CCR Chapter 11, Appendix X?
6. Does it display a hazardous characteristic?
7. Is it a waste regulated under TSCA?
8. May the waste be disposed as general trash?

If the waste determination cannot be completed based on process knowledge or from past waste analyses of inherently similar wastes; either field screening or, if necessary, sampling and analyses, will be used to support the determination.

If required, sample collection and analyses will follow the guidelines established in EPA's SW-846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. Sampling will be conducted in accordance with QAPP-10784, *Quality Assurance Program Plan*.

4.6 Site Waste Streams

The following waste streams are anticipated to be generated under the scope of this WMP. If unexpected waste streams are encountered, they will be characterized in accordance with the provisions of Section 4.5, and managed accordingly.

DRAFT

Table 4.1 – Covered Waste Streams

Activity	Waste	Waste Classification	Estimated Annual Volume	Disposition (Examples)
Investigation-Derived Waste (IDW)	Purge and decontamination water from groundwater monitoring	Non-hazardous wastewater or RCRA Hazardous ¹	< 300 gallons	Clean Harbors or Southwest Treatment Systems, Inc. or Siemens USA
	Personal protective equipment, plastic sheeting	Sanitary or RCRA Hazardous ¹	< 0.5 cubic yards	Clean Harbors
	Tritium contaminated groundwater ²	License Exempt Tritium contaminated groundwater ¹	< 100 gallons	Clean Harbors
Groundwater Infiltration (Bldg. 4024)	Groundwater	Non-hazardous wastewater	< 60,000 gal ³	Southwest Treatment Systems, Inc.
S&M, Facility Maintenance & Project Support	Lamps, switches, etc.	Universal wastes	< 0.25 cubic yards	Universal waste disposal facility
	Ballasts, etc.	PCB Bulk waste	< 0.25 cubic yards	Clean Harbors
	Used oil	Used oil (vehicle maintenance)	< 20 quarts	Certified Collection Center (local recycler)
	Swipes, quality control samples, PPE, paper towels, smears, air filters, etc.	Non-hazardous waste	< 0.25 cubic yards	Storage pending disposal during D&D ⁴
Legacy Waste ⁵	TBD	TBD	TBD	Storage pending disposal during D&D ⁴

¹These wastes will be classified based on the profile of the IDW groundwater.

²From the sampling of specific wells that have historically contained tritium.

³The annual volume will depend on annual precipitation.

⁴These waste streams are the only radiological wastes potentially generated during the non-D&D activities covered by this WMP. Due to the expected low waste volumes, it will be more cost-effective to defer final disposition of these wastes until the D&D phase of the project.

⁵To be identified.

4.7 Pollution Prevention/Waste Minimization Practices

North Wind will plan waste management activities to meet the obligations and responsibilities under Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements* and the *Pollution Prevention Act* of 1990. North Wind will establish policy, goals, and roles/responsibilities related to pollution and will integrate pollution prevention and waste minimization into the implementation of EMS-10784, *Environmental Management System Description*.

All North Wind site activities will be conducted in conformity with Boeing's site wide *Stormwater Pollution Prevention Plan (SWPPP)* and *SSFL Facility Spill Prevention and Response Plan (SPCC)*. All personnel with responsibility under this WMP, including any contractors working on-site, will be provided copies of these documents.

North Wind will minimize the generation of waste during this work scope using the following EPA guidance:

- Reduce
- Reuse/Recycle
- Disposition

Reduce – During project planning, every effort will be made to minimize the amount of waste generated by the following means:

- Use the least hazardous chemicals/products possible
- Purchase only the amount of materials required
- Perform as many tasks outside a contamination area as possible
- Limit the materials taken into contamination areas
- Decontaminate items to the greatest extent practical
- Aggressively sort and segregate materials

Reuse/Recycle – Reusable items (not disposable) will be used when possible.

Disposition – North Wind will maintain treatment/disposal contracts for all waste types generated. In all cases, the most cost-effective and compliant alternative will be selected.

4.8 Tanks and Containers

All wastes generated within the scope of this plan will be stored in appropriate storage tanks or containers pending transportation for off-site disposition.

4.8.1 Tank or Container Selection

Wastes will be immediately placed in either a temporary or a permanent storage container at the time and place of generation. The tank or container will be appropriate to the waste being managed, will be in sound physical condition, and will be free of contamination from any prior

storage of materials not inherently similar to the waste being managed. The container will meet all DOT criteria for shipping the container on public roadways.

The WMS, or designee, is responsible for ensuring that the chosen storage container is appropriate for the physical characteristics of the waste (e.g., bulk containers for bulk wastes, liquid-rated containers for liquid wastes, and vented containers for potentially flammable wastes).

Storage tanks and containers must be maintained in a fully closed condition (all lids, access ports, bungs, etc. in place and fully secured) except when waste is being actively transferred to or from the storage container.

4.8.2 Labeling

All storage containers will be appropriately labeled prior to placing waste into the container. If the appropriate label cannot be affixed prior to adding waste, labeling must be completed as soon as possible after the waste is added.

All labels will conform to applicable federal and California regulations for labeling (CCR §66262.31) and will be completely filled out prior to being placed on the storage device. All RCRA Hazardous Wastes will have both an EPA and a California waste number.

4.9 Waste Accumulation and Storage

Wastes will be accumulated or stored in designated areas. Satellite Accumulation Areas (SAAs) may be used to hold up to 55-gal of hazardous waste, LLRW or LLMW (or 1 quart of acutely hazardous waste) at or near the point of generation, if they are encountered. SAAs will be established in consultation with Boeing, DOE and the WMS, or designee. Once this limit has been reached or the generation of the waste is complete, the container(s) will be transferred to the Radioactive Materials Handling Facility (RMHF), a RCRA-permitted facility, for storage, pending receipt of the analytical results which will be used to characterize the waste for disposition. Additional information regarding the RMHF may be found in the RCRA permit and related documents, including the RMHF Contingency Plan, for that facility.

The waste will be managed as non-hazardous, RCRA hazardous or other classification, depending on the profile of the waste.

4.9.1 Inventory Control

An inventory number will be assigned to each container prior to packaging. This number will be unique to the waste being packaged and will facilitate the reuse of containers when appropriate. A database will be used to track the inventory from the point of generation to the point of off-site disposition.

4.9.2 Inspections

North Wind will conduct daily inspections of all tanks or tank systems to assess the structural integrity of each tank, signs of corrosion or releases of wastes, and the integrity of the associated secondary containment systems. In addition, data from monitoring or leak detection systems will be reviewed daily to ensure the tank is being properly operated. Cathodic protection systems will be inspected annually. The condition of all tanks and tank systems will be assessed periodically in accordance with American Petroleum Institute Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*. (22 CCR 66264.195)

In addition to the daily tank inspections, weekly inspections of all areas used for hazardous waste accumulation, storage or transfer, to identify issues such as deteriorating or leaking containers, containment system problems or other factors. (22 CCR 66265.174)

At a minimum, the inspections will include:

- Closed Containers – If drums or containers are found with missing or open bungs, lids, or rings, the issue(s) are to be repaired or replaced immediately.
- Mislabeled Containers – Missing or incomplete labels must be corrected immediately.
- Appropriate containers - Ensure that wastes are stored in the appropriate containers that will not react with, or are otherwise incompatible with the hazardous waste that is stored.
- Container Damage and Contamination – The containers in all hazardous waste storage areas are to be free of dents, bulges, or other defects, and must have a clean exterior.
- Spills and Leaks – Check for signs of spills and leaks, and report any spills immediately. Ensure that containers are not overfilled.
- Containment - Spill containment for the hazardous waste being stored must be adequate and in good condition.
- Signage – Check for appropriate signage around all hazardous waste storage areas (i.e., “Hazardous Waste Storage Area”, “Authorized Personnel Only”, “No Smoking”, etc.).
- Good Housekeeping – Storage areas must be in good condition and free of liquids. Check for proper aisle space, no breaches in containment, no excess waste, etc.
- Ensure that incompatible wastes are not stored together in a hazardous waste storage area unless separated by appropriate containers, berms, drainage areas, or other permanent structures.

If any adverse conditions are identified during any of the inspections required by this section, the appropriate corrective actions shall be taken in a timely manner depending on the exigencies of

the identified condition(s) See the facility's hazardous waste contingency plan for additional details.

4.10 Wastewater Management

Wastewater (including non-hazardous, hazardous, and tritiated wastewater) will be managed in accordance with WMP-10784-001, *Wastewater Management Procedure*.

4.11 Transport and Off-Site Disposition of non-D&D Wastes

Transport and off-site disposition of all non-D&D wastes (excluding general trash) will be in accordance with the WMP-10784-001, DOT regulations 49 CFR Part 172, *et seq.* and *DOE/ETEC Transportation Plan* from Appendix 11 of the Performance Work Statement (See Appendix B). This WMP will be revised when North Wind is authorized to proceed with D&D work. Waste management and waste transportation will be addressed at that time for D&D generated wastes.

Transportation and disposal (T&D) of all non D&D wastes will be the responsibility of the WMS or designee. North Wind will contract with T&D contractors for the off-site disposition of all wastes in general accordance with the waste acceptance criteria for each off-site TSDF, and the information in Table 4.1, above. Off-site TDFs must be in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at the time wastes are shipped to the TSDF (See 40 CFR 300.440). No waste will be disposed at the Kettleman Hills disposal site.

No less than 120 days prior to shipment of any non-D&D waste, North Wind will provide DOE a waste profile consistent with the waste acceptance criteria (WAC) of the receiving waste disposal facility. North Wind will notify DOE at least 10 days in advance of all shipments.

If unexpected LLRW or LLMW is generated, North Wind will prepare an exemption request and receive DOE approval, prior to the use of a waste treatment and/or disposal facility. Existing DOE contracts for the disposition of LLRW and LLMW will be utilized whenever possible. This will be carried out in compliance with DOE O 435.1 and, if applicable, O 458.1, *Radiation Protection of the Public and the Environment* and other applicable regulations.

North Wind, through its transportation contractors, will ensure that all vehicles are roadworthy and that all drivers and other personnel are properly trained.

4.11.1 Shipping Documents and Recordkeeping

All shipments of waste for off-site disposition will be accompanied by the appropriate, fully-executed shipping papers (e.g., hazardous waste manifest, non-hazardous waste manifest, bills of lading, etc.). The unique inventory number for each container will be tracked to the associated tracking paper and, from there, to the point of final off-site disposition.

Each transporter will be required to demonstrate that the wastes were transferred to the indicated off-site TSDF (or a designated alternative facility), either as part of the normal handling of the

associated shipping papers, or separately. After final disposition, the off-site TSDF will be required to certify that the waste has been properly treated or disposed.

In the case of hazardous waste shipments, a DTSC-compliant manifest will be used to document shipment of the waste to the receiving TSDF. North Wind will complete the manifest using DOE's generator identification number and indicating DOE as the generator of the waste. On behalf of DOE, a designated North Wind representative who has been previously accepted by DOE for this purpose, will make the required certifications (e.g., land disposal restrictions) and sign the manifest on behalf of DOE.

During transport, North Wind will require that each transporter have a system in place that will allow North Wind to determine the exact location of the shipment within two hours of requesting that information from the transporter. Acceptable systems include communication systems, global positioning systems, or a combination of the two.

All of the records generated during the implementation of this section will be maintained in accordance with the requirements of Section 5, below, for a minimum of three years from the date of the initiating event.

4.11.2 Non-Conforming Shipments

The procedures in this WMS are designed to ensure against non-conforming shipments. However, should a shipment be determined not to conform with any applicable T&D requirement, the WMS, in coordination with the Facility Manager, will coordinate with the transporter and TSDF, as applicable and appropriate, to determine the exact nature of the non-conformance and the appropriate corrective measure(s). The Facility Manager will be responsible for approval and implementation of the selected corrective measures whether by North Wind, transporter, TSDF, or other contractor personnel.

5. RECORDS

Records provide a basis for planning, measuring performance, resolving quality problems and providing insight to the effort to improve quality. It is essential that records are produced within a framework that promotes quality. North Wind personnel are responsible for the preparation, interim custody, transfer and storage of records that result from the implementation of this WMP. Records will be maintained in accordance with QAP-10784-171, *Records Management*.

6. REFERENCES

DOE Order 360.1C, Federal Employee Training

DOE Order 435.1, Radioactive Waste Management

DOE Order 458.1, Radiation Protection of the Public and the Environment

EMS-10784, Environmental Management System Description

EPA SW-846, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods

ISMS-10784, Integrated Safety Management System

QAPP-10784, Quality Assurance Program Plan

QAP-10784-171, Records Management

WMP-10784-001, Wastewater Management Procedure

DRAFT

APPENDIX A
DTSC Hazardous Waste Generator Requirement

DRAFT

Fact Sheet
January 2002

Hazardous Waste Generator Requirements



CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, (CAL/EPA)
DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. DTSC's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California



California
Environmental
Protection Agency



I. INTRODUCTION

This fact sheet provides information and guidance on the requirements for Hazardous Waste Generators pursuant to the California Health and Safety Code (Health & Saf. Code) and Title 22, California Code of Regulations (Cal. Code Regs.). A "generator" is any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. (Title 22, Cal. Code Regs., section 66260.10.) This fact sheet does not replace or supersede relevant statutes and regulations. The information contained in this fact sheet is based upon the statutes and regulations in effect as of the date of the fact sheet. Interested parties are advised to keep apprised of subsequent changes to relevant statutes and regulations. Unless otherwise specified, the citation for each requirement is from Title 22, Cal. Code Regs.

II. REQUIREMENTS

The following requirements apply to generators of hazardous waste except for generators that generate no more than 100 kg exclusively of silver-only hazardous waste. (Please see Section III of this fact sheet for the requirements that apply to generators that generate no more than 100 kg exclusively of silver-only hazardous waste.)

A. HAZARDOUS WASTE DETERMINATION

Determine if the waste is hazardous. Is it toxic, reactive, ignitable or corrosive? (Section 66262.11.) Is the waste listed as a hazardous waste in article 4 or Appendix X of chapter 11 of division 4.5 of Title 22, Cal. Code Regs?

B. IDENTIFICATION NUMBER

This number identifies each handler on hazardous waste manifests and other paperwork. The identification number enables regulators to track the waste from origin to final disposal ("cradle to grave"). These numbers are site-specific and there must be only one number at a single address. If you have a business that

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

generates waste at multiple addresses, each address needs a separate identification number.

All hazardous waste transporters and permitted treatment, storage and disposal facilities (TSDFs) must have an identification number. Hazardous waste generators must have an identification number (section 66262.12) unless you generate only silver waste less than or equal to 100 kg per month. (Health & Saf. Code, sections 25160.2 (b)(10) and 25160.2 (e)).

Handlers of federally-regulated RCRA waste who need an identification number should contact the U.S. EPA at 415-495-8895. Handlers of State regulated hazardous waste who do not need the federal number should contact DTSC's Generator Information Services Section (GISS) at 800-618-6942. (Section 66262.12.) Out-of-State callers should call 916-255-1136 to obtain an identification number. There is no fee to obtain an identification number. However, every generator number is subject to an annual verification, and for those with 50 or more employees a verification fee is assessed. (Health & Saf. Code, section 25205.16.) For more detailed explanation on identification numbers, read DTSC's Fact Sheet "EPA Identification Numbers" (September 2000).

C. ACCUMULATION

(1) Hazardous waste may be accumulated onsite in generator accumulation units (containers, tanks, drip pads, or containment buildings) only in compliance with the applicable time limits specified in Health & Saf. Code, section 25123.3 (90 days, 180 days, 270 days or 365 days). (Section 66262.34.)

(2) If hazardous waste is accumulated in containers, a generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 9 (Use and Management of Containers). These requirements include:

(a) Placing containers holding ignitable or reactive wastes at least 15 meters (50 feet) from the facility's property line. (Section 66265.176.)

(b) Not placing incompatible waste streams into the same container. (Section 66265.177.)

(c) Separating a container holding a hazardous waste that is incompatible with any waste or other materials transferred or stored nearby in other containers, piles, open tanks, or surface

impoundments from the other materials or protecting them by means of a dike, berm, wall, or other device. (Section 66265.177.)

(3) Maintaining all containers so that they are:

- (a) in good condition (Section 66265.171);
- (b) compatible with contents (Section 66265.172);
- (c) closed, except when adding or removing hazardous waste (Section 66265.173);
- (d) managed to avoid rupture or leaks (Section 66265.173);
- (e) inspected weekly (Section 66265.174); and
- (f) properly labeled (Section 66262.34).

(4) While DTSC does not require secondary containment for a generator's hazardous waste containers, local codes may require it.

(5) If hazardous waste is accumulated in tanks, a generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 10 (Tank Systems Standards) except for Sections 66265.197(c) and 66265.200. These requirements include maintaining all tanks so that the tanks are:

- (a) inspected daily (Section 66265.195);
- (b) properly labeled (Section 66262.34); and
- (c) designed to hold hazardous waste and not collapse or leak. (Section 66265.192.)

Most tanks and tank systems must have secondary containment. Secondary containment can include a liner, vault or double-walled tank. Appurtenances also must be contained. Secondary containment needs to be certified by a professional engineer registered in California. (Section 66265.191-66265.196.)

(6) If hazardous waste is placed on drip pads, the generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 17.5 (Drip Pads) and maintain the following records at the facility:

- (a) a description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and
- (b) documentation of each waste removal,

including the quantity of waste removed, the sump or collection system and the date and time of removal.

If hazardous waste is accumulated in containment buildings, the generator must comply with Title 22, Cal. Code Regs., division 4.5, chapter 15, article 29 (Containment Buildings), and obtain a professional engineer certification that the building complies with the design standards specified in Section 66265.1101. The engineer certification is required prior to operating the unit and must be placed in the facility's operating record. (Section 66262.34 (a)(1)(C)).

(7) The owner or operator of a containment building must maintain the following records at the facility:

(a) a written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and facility management practices showing that they are consistent with the 90 day limit, and documentation that the procedures are complied with (Section 66262.34 (a)(1)(C)(1)); or

(b) documentation that the unit is emptied at least once every 90 days. (Section 66262.34 (a)(1)(C)(2)).

(8) A generator accumulating in tanks or containers is exempt from articles 7 and 8 in Title 22, Cal. Code Regs., division 4.5, chapter 15, except Sections 66265.111 (Closure Performance Standards) and 66265.114 (Decontamination). (Section 66262.34 (a)(1)).

For a more detailed explanation on accumulation requirements, read DTSC's "Accumulating Hazardous Wastes at Generator Sites" Fact Sheet (January 2002).

D. LABELING/MARKING

(1) The date upon which each period of accumulation begins must be clearly marked and visible for inspection on each accumulation unit. (Section 66262.34.)

(2) While being accumulated on site, each generator tank or container must be labeled or clearly marked with the words, "Hazardous Waste." (Section 66262.34.)

(3) Each container and portable tank in which hazardous waste is accumulated must be labeled with the following information:

(a) composition and physical state of the waste;

(b) statement or statements that call attention to the particular hazardous properties of the waste (e.g. flammable, reactive); and

(c) name and address of the generator. (Section 66262.34.)

(4) Containers and tanks used by the generator to collect or consolidate wastes initially accumulated in other containers or tanks are subject to the same labeling requirements. The initial accumulation and "90-day period" dates on the "collection" container/tank must be the oldest of the initial accumulation and "90-day period" dates from the various containers/tanks emptied into the "collection" container/tank. This may require dates to be changed if wastes from "older" containers/tanks are added to the "collection" container/tank.

(5) In some cases, containers are continuously reused for accumulation of the same waste stream; e.g., drums used to initially accumulate waste which when full are emptied into larger "collection" containers. "Recurring use" labels may be used on such containers to revise the initial accumulation and "90-day period" dates (without having to change the other labeling information). If the container is emptied at least once each day, the word "daily" may be used in the date area of the label.

E. EMERGENCY PROCEDURES/ CONTINGENCY PLANS

(1) ALL GENERATORS

All generators must comply with these requirements regarding preparedness and prevention:

(a) All operations must minimize the possibility of a fire, explosion or any unplanned release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. (40 C.F.R. section 265.31, Section 66265.31)

(b) A generator's site must be equipped with the following, unless it can be demonstrated to DTSC

that none of the hazards posed by waste could require a particular kind of equipment specified below:

(1) Internal communication or alarm system to provide immediate instruction to personnel;

(2) A telephone, two-way radio, or similar device, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(3) Portable fire extinguishers, fire control equipment, spill containment equipment and decontamination equipment; and

(4) Water at adequate volume and pressure to supply water hose streams or foam producing equipment or automatic sprinklers or water spray systems. (40 C.F.R. section 265.32, section 66265.32)

(c) All communications and alarm systems, fire protection equipment, spill control equipment and decontamination equipment, where required, must be tested and maintained as necessary to ensure its proper operation in time of emergency. (40 C.F.R. section 265.33, section 66265.33)

(d) Whenever hazardous waste is being handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless DTSC has determined that such a device is not required. (40 C.F.R. section 265.34, section 66265.34.)

(e) If only one employee is on the premises while the facility is operating, he/she must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless DTSC has determined that such a device is not required under section 66265.32. (40 C.F.R. section 265.34, section 66265.34)

(f) The generator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of operation in an emergency, unless it can be demonstrated to DTSC that aisle space is not needed for any of these purposes. (40 C.F.R. section 265.35, section 66265.35)

(g) The generator must attempt to make the following arrangements, as appropriate, for the types

of waste handled at the site and the potential need for the services of these organizations:

(1) Arrangements to familiarize police and fire departments, emergency response teams and the local Office of Emergency Services with the layout of the facility, properties of the hazardous waste, associated hazards, places where personnel would normally be working, entrances to roads inside the facility and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors and equipment suppliers;

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled and the types of injuries or illnesses that could result from fires, explosions or releases at the facility; and

(5) Where State or local authorities decline to enter into such arrangements, the generator must document the refusal in the operating record. (40 C.F.R. section 265.37, section 66265.37)

(2) LESS THAN 1000 KG/MONTH

Generators that generate less than 1000 kg/month of hazardous waste must comply with the following requirements (40 C.F.R. section 262.34(d)(5)):

(a) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This employee is the emergency coordinator. (40 C.F.R. section 262.34(d)(5)(i)).

(b) Post the following information next to the telephone:

(1) The name and telephone number of the emergency coordinator;

(2) The location of fire extinguishers and spill control material, and, if present, fire alarm; and

(3) The telephone number of the fire department, unless the facility has a direct alarm.

(40 C.F.R. section 262.34(d)(5)(ii)).

(c) The emergency coordinator or his/her designee must respond to any emergencies that arise. In the event of a:

(1) Fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(2) Spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(3) Fire, explosion, or other release that could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). (40 C.F.R. Section 262.34(d)(5)(iv)).

(3) 1000 KG/MONTH OR MORE

Each generator that generates 1000 kg/month or more of hazardous waste per month must comply with the requirements of Title 22, Cal. Code Regs., division 4.5, chapter 15, article 4. These requirements include:

(a) The generator must prepare and retain a written contingency plan and emergency procedures for dealing with emergencies. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. (Section 66265.51.)

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment. (Section 66265.51.) The contents of a contingency plan can be found in section 66265.52.

(c) At all times there must be at least one employee, either on the premises or on call (i.e., available to respond to an emergency by reaching the site within a short period of time), with the responsibility for coordinating all emergency response measures. In addition, this person must have the authority to commit resources needed to carry out the contingency plan. (Section 66265.55.)

F. TRAINING

(1) Generators that generate less than 1000 kg/month of hazardous waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies. (40 C.F.R. section 262.34(d)(5)(iii)).

(2) Generators that generate 1000 kg or more per month of hazardous waste must comply with the requirements of section 66265.16. These requirements include:

(a) Personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the generator's compliance with the regulatory requirements.

(b) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(c) At a minimum, the training program must be designed to ensure that personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including other applicable requirements.

(d) Personnel must successfully complete the program within six months after employment or assignment to the facility. Personnel must not work in unsupervised positions until they have completed the training requirements referenced above. They must also take part in an annual review of the initial training.

(e) The following documents and records must be maintained at the facility:

(1) The job title for each position related to hazardous waste management, and the name of the employee filling each job.

(2) A written job description for each position related to hazardous waste management, including the requisite skill, education or other qualifications and duties of employees assigned to each position.

(3) A written description of the type and

amount of both introductory and continuing training that will be given to each person filling each of these positions.

(4) Records that document that the training or job experience required has been given to, and completed by, facility personnel.

(5) Training records on current personnel must be kept until closure of the site. Training records on former employees must be kept for at least three years from the date the employee last worked at the site. Personnel training records may accompany personnel transferred within the same company. (Section 66265.16.)

G. SHIPMENT

When shipping hazardous waste totaling more than 50 pounds/5 gallons off the premises a generator must:

(1) Use only transporters, and transfer, treatment, storage and disposal facilities that are registered or permitted by DTSC and have obtained an ID number (Section 66262.12);

(2) Comply with Department of Transportation (DOT) requirements for packaging, labeling and marking and ensure that the transport vehicle is correctly placarded (Section 66262.32);

(3) Use a California Hazardous Waste Manifest, DTSC Form 8022A, unless the receiving state requires otherwise. A manifest is the paperwork that accompanies hazardous waste from the point of generation to the point of ultimate treatment, storage or disposal. Manifests may be ordered from the Department of General Services, P. O. Box 1015, North Highlands, CA, 95660. For general manifest questions, call DTSC's GISS at 1-800-618-6942. Out-of-State callers should call (916) 255-1136 for additional information regarding manifests (Section 66262.20 and Section 66262.21);

(4) Complete the generator and waste sections and sign the manifest certification according to the instructions included in the Appendix to Chapter 12

of Division 4.5, Title 22, Cal. Code Regs. (Section 66262.23);

(5) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest (Section 66262.23);

(6) Retain two copies of the manifest, in accordance with Section 66262.40(a) (Section 66262.23) ;

(7) Keep the generator copy of each manifest for three years or until the signed copy is returned by the designated facility (See (13) below). This signed copy must be retained for at least three years from the date the waste was accepted by the initial transporter (Section 66262.40);

(8) Ensure that if shipping hazardous waste to an out of state non-permitted TSD, that the TSD signs and returns the final copy of the manifest to the generator, who is then responsible for sending the signed copy to DTSC (Section 66262.23);

(9) Submit the appropriate copy of each manifest used to DTSC, within thirty (30) days of each shipment (Section 66262.23);

(10) If a manifest from another state is used to ship hazardous waste to that state, then submit a legible copy of the manifest used to DTSC within thirty (30) days of each shipment (Health & Saf. Code, section 25160);

(11) Ship waste only to facilities authorized to accept the waste type (Section 66262.20);

(12) Contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste if the generator has not received a copy of the manifest signed by the operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter; and

(13) File an Exception Report with DTSC if a copy of the manifest signed by the facility operator is not received within 45 days of the date the waste was

accepted by the initial transporter. The time to file an exception report is 60 days for generators of less than 1000 kilograms per month and who meet other specified requirements. (Health & Saf. Code, section 25123.3 (h)(2)). These reports must be retained for a period of three years (Section 66262.42.) NOTE: For generators of less than 100 kilograms per month, there are certain transportation allowances. See Health & Saf. Code, section 25163(c).

H. BIENNIAL REPORT

Submitting a biennial report is required for a generator who ships any hazardous waste to a transfer, treatment, storage or disposal facility within the United States. The report is due by March 1 of each even-numbered year and covers the previous year of hazardous waste activity. (Section 66262.41.) Copies must be retained for three years. (Section 66262.40.) For more information regarding biennial reports, call the Biennial Report Hotline at (916) 322-2880.

III. SILVER-ONLY GENERATOR

Generators that generate no more than 100 kg exclusively of silver-only hazardous waste must comply only with the federal Conditionally Exempt Small Quantity Generator (CESQG) requirements in 40 C.F.R. section 261.5, instead of the Cal. Code Regs., Title 22 requirements. They need only to:

- (1) Determine if their waste is hazardous (40 C.F.R., 261.5(g)(1));
- (2) Accumulate no more than 100 kg of hazardous waste at any one time (40 C.F.R., 261.5(g)(2)); and
- (3) Ensure that the disposal or recycling of the hazardous waste is done at an authorized facility (40 C.F.R. 261.5(g)(3)).

These silver-only generators do not need to obtain an identification number and they do not have to use a hazardous waste manifest or registered hazardous waste transporter when shipping their hazardous waste. For more information on the regulation of silver wastes, please read the DTSC fact sheet titled "Onsite Tiered Permitting: Changes in Regulations of Silver Wastes [as established by Senate Bill (SB) 2111] (Revised January 2000)."

All questions regarding Hazardous Waste Generator Requirements should be directed to the DTSC Office nearest you. You may contact the regional Public and Business Liaisons by calling (800) 72TOXIC (1-800-728-6942), or by visiting DTSC's web site at www.dtsc.ca.gov

**DTSC Headquarters
1001 I Street, Sacramento, CA 95812
(916) 323-2678**

**Sacramento Office
8800 Cal Center Drive
Sacramento, CA 95826
(916) 255-3617**

**Berkeley Office
700 Heinz Avenue, 2nd Floor,
Berkeley, CA 94710
(510) 540-3739**

**Clovis Office
1515 Tollhouse Road
Clovis, CA 93611-0522
(559) 297-3901**

**Glendale Office
1011 North Grandview Avenue
Glendale, CA 94710
(818) 551-2830**

**Cypress Office
5796 Corporate Ave.
Cypress, CA 90630
(714) 484-5400**

**San Diego Office
2878 Camino del Rio South, Suite 402
San Diego, CA 92108-3847
(619) 278-3734**

IV. DEFINITIONS

Container: A device that is open or closed, and portable, in which material can be stored, handled, treated, transported, recycled or disposed of. Note: Railroad cars are "containers", since they are portable when full and are subject to all storage and management requirements and restrictions applicable to containers.

Containment Building: A hazardous waste management unit that is used to store or treat hazardous waste under the provisions of article 29 of chapter 14 or 15, division 4.5, Title 22, Cal. Code Regs.

Drip Pad: An engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

Generator or Producer: Any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation.

Grant of Authorization: A permit, interim status authorization, variance, permit-by-rule, conditional authorization, conditional exemption, or consent order.

Hazardous Waste Facility or Facility: All contiguous land and structures, other appurtenances, and improvements on the land used for treatment, transfer, storage, resource recovery, disposal or recycling of hazardous wastes. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

Non-RCRA Hazardous Waste: All hazardous waste regulated in the State of California, other than RCRA (federally-regulated) hazardous waste. A hazardous waste is presumed to be RCRA hazardous waste, unless it is determined pursuant to Section 66261.101 that it is a non-RCRA hazardous waste.

Offsite: Any site that is not onsite.

Onsite: Geographically contiguous property that may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing as opposed to going along the right-of-way.

Noncontiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, are also considered onsite property.

RCRA: Resource Conservation and Recovery Act (RCRA). Federal statute that regulates generators, transporters, and facilities that treat, store or dispose of hazardous waste. All RCRA hazardous wastes are identified in Part 261 of title 40 of the C.F.R. and appendices and title 22, Cal. Code Regs., Section 66261.1et seq.

Silver-only Hazardous Waste: Wastes containing silver or silver compounds that are hazardous waste solely due to the presence of silver in the waste. These wastes are regulated according to the provisions of Health & Saf. Code, section 25143.13.

Storage Facility: A hazardous waste facility at which the hazardous waste is either:

- (a) held onsite past the applicable time limit (90/180/270 days);
- (b) held for any period of time at an offsite facility that is not a transfer facility; or
- (c) held at a transfer facility for periods longer than six days, or longer than 10 days for transfer facilities located in industrial areas.
- (d) DTSC may extend the above period of time for hazardous waste that is generated as a result of an emergency release and that is collected and temporarily stored by emergency rescue personnel, as defined in Section 25501, or by a response action contractor, upon the request of emergency rescue personnel or the response action contractor.
- (e) The hazardous waste is held at a transfer facility for any period of time in a manner other than in a container or tank.
- (f) The hazardous waste is held at a transfer facility for any period of time and handling occurs other than the transfer of packages or containerized hazardous waste from one vehicle to another.
- (g) A grant of authorization from the Department is required for a Hazardous Waste Storage Facility.

Tank: A stationary device, designed to contain an accumulation of hazardous waste constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support. Note: Devices designed to allow attached "hard-piping" are considered to be tanks because this indicates that they are not intended to be moved while in use.

**APPENDIX B
DOE / ETEC TRANSPORTATION PLAN**

DRAFT

North Wind Inc.
DE-EM0000837
DE-DT0007583
ETEC Environmental Monitoring and D&D
SECTION C - PWS: Appendix 11 - DOE ETEC Transportation Plan

DOE/ETEC Transportation Plan

October 2013

North Wind Inc.
DE-EM0000837
DE-DT0007583

EETEC Environmental Monitoring and D&D
SECTION C – PWS: Appendix 11 – DOE ETEC Transportation Plan

1.0 BACKGROUND

This Transportation Plan defines the methods used to control traffic by tractor-trailers or a combination of a straight truck and trailer, supporting day-to-day operations, such as groundwater management or demolition activities at Santa Susana Field Laboratory (SSFL) on behalf of either the U.S. Department of Energy (DOE) or DOE contractors, located in unincorporated Simi Valley, Ventura County, California.

2.0 PURPOSE AND OBJECTIVE

The purpose of this Transportation Plan is to communicate the established protocols and responsibilities associated with transportation activities for DOE and minimize potential health, safety, and environmental risks that may result from activities at SSFL. All transportation activities shall be performed in accordance with applicable federal, state, and local laws, regulations, and ordinances.

3.0 REQUIREMENTS OF TRANSPORTERS

Transporters shall be selected based on their performance and the Federal Motor Carrier Safety Administration Safety and Fitness Electronic Records (SAFER) System. The selected transporters shall be qualified, fully licensed, and insured for the materials being transported. For transportation of hazardous wastes, the selected transporter shall also be a registered hazardous waste hauler.

RCRA or California-hazardous wastes shall be placed in closed-top transport bins or other DOT-approved containers and transported by truck in accordance with applicable transport regulations.

Prior to leaving the SSFL, non-hazardous waste shall be wrapped and covered with a tarp completely extending over the truck bed. Trucks shall be decontaminated by dry-brushing or other approved methods prior to leaving the staging/loading areas to prevent track out.

4.0 TRANSPORTATION ROUTES

Transportation of wastes shall occur on arterial streets and/or freeways, approved for truck traffic, to minimize any potential impact on the local neighborhoods. No stopping along Woolsey Canyon Road is permitted, except in designated turnouts, unless an emergency situation exists. Under no circumstances will Black Canyon Road be used for truck traffic. This road is not suitable for truck traffic.

The recent traffic study completed by a DOE contractor has shown the turn on Valley Circle to be a problem spot for the heavy trucks that will use the road daily due to narrow turn clearance, and the truckers shall use caution in transporting debris and waste in this area.

5.0 TRAFFIC CONTROL AND LOADING PROCEDURES

Trucks shall be dispatched from SSFL at set intervals to avoid traffic problems along Woolsey Canyon Road, the significant local traffic bottleneck at the bottom of the hill. Truck traffic will be restricted to

North Wind Inc.
DE-EM0000837
DE-DT0007583

EETEC Environmental Monitoring and D&D
SECTION C – PWS: Appendix 11 – DOE ETEC Transportation Plan

the hours of 6:00am to 4:00pm (trucks shall not arrive at SSFL before 6:00am) and will be staggered to allow 12 round trip truckloads per day. The DOE truck traffic shall have to coordinate with Boeing and NASA, as they will also be transporting up to 12 round trips per day, to limit disruption to the local community that lives close to the site. Other times of travel shall be avoided as much as possible. However, certain activities may require shipping activities between 4:00pm and 7:00pm.

Although truck drivers shall be instructed to approach the SSFL at the prescribed intervals to minimize congestion and wait times, there is always the possibility that some trucks may approach the SSFL ahead of time. Drivers are expected to obey the rules of the road and the posted signage at all times; compliance with these requirements is mandatory. Failure to comply with these requirements may result in revoking drivers' access to the facility.

A copy of the SSFL trucking instructions, shown in Appendix A, shall be provided to all tractor trailer drivers when they sign in at the gate to communicate the requirements of this plan. In addition, the Contractor and field coordinators shall take the necessary actions to implement compliance with this plan.

6.0 VEHICLE INSPECTIONS

All vehicles subject to this plan are also subject to the requirements of the Federal Motor Carrier Safety Regulations and the California Highway Patrol Regulations (Title 13, Section 1215) pertaining to motor carriers. Each of these regulations require the motor carrier to have in place a program that documents daily vehicle inspection records attesting to the roadworthiness of the vehicle.

7.0 SHIPMENT DOCUMENTATION

The characteristics of the waste shall be determined prior to transportation offsite. Hazardous waste manifests, non-hazardous waste manifests, or bills of lading shall be provided to the trucking companies as shipping document depending on the type of material being transported.

8.0 RECORDKEEPING

A copy of the shipping document for each truckload shall be maintained by the contractor. Records shall be maintained of the waste transportation operations and in accordance with record retention requirements mandated by State and Federal regulations.

9.0 HEALTH AND SAFETY

All tractor trailer drivers are subject to the Contractor's Worker Safety and Health Plan while on the SSFL site. Site workers shall be properly trained in hazardous waste operations in accordance with 29 CFR 1910.120 and CCR Title 8 Section 5192. Drivers shall not be permitted to assist in loading operations.

North Wind Inc.
DE-EM0000837
DE-DT0007583
ETEC Environmental Monitoring and D&D
SECTION C - PWS: Appendix 11 - DOE ETEC Transportation Plan

Appendix A

SSFL Trucking Instructions

North Wind Inc.
DE-EM0000837
DE-DT0007583

ETEC Environmental Monitoring and D&D
SECTION C – PWS: Appendix 11 – DOE ETEC Transportation Plan

Trucking Instructions for Santa Susana

It is DOE’s goal to cooperate with the homeowners adjacent to our property in Ventura County and along the access road, Woolsey Canyon Road, in Los Angeles County. As such, the following requirements have been established.

This goal applies to all Class A Trucks, defined as follows:

- A **Class A truck** is any combination of vehicles with a GVWR of 26,001 lbs (11,793 kg) or more pounds, provided the GVWR of the vehicle(s) being towed is in excess of 10,000 pounds (4536 kg)

You are expected to obey the rules of the road and the posted signage at all times.

Your cooperation with these requirements is mandatory. Failure to comply with these requirements may result in revoking your access to the facility.

Tractor-Trailers Arriving at Santa Susana

Permit loads shall be coordinated with the assigned Boeing Field Coordinator 48-hours in advance of arrival.

Drivers will leave sufficient space between vehicles to permit homeowners to enter or leave their properties.

Drivers will use the turnouts along Woolsey Canyon Road to allow motorists to pass.

Tractor-Trailers Departing Santa Susana

Drivers shall follow the direction of the Field Coordinator to ensure that transportation plan requirements are met.

Drivers shall not depart earlier than 7:00 am and not later than 4:00 pm, without specific concurrence from Boeing.

Drivers shall cover all end dumps and roll off trucks containing debris (e.g. concrete, soil, asphalt, metals) before leaving the truck scale area.

Departures for tractor-trailers shall be scheduled in such a manner that a minimum five minute gap occurs between each vehicle leaving the site

(unless a specific instruction is given indicating another time). Queuing will be in accordance with sketch to the right (behind the line painted on the ground).

Do not block the intersection or the entrance to Building 436.

To minimize noise impacts, drivers shall not use engine brakes, except when necessary.

Drivers shall use the area outside the gate to check their brakes if necessary but not to wait for other drivers.

Drivers shall not convoy through or spend the night in the adjacent neighborhoods.

