**FORMERLY UTILIZED SITES REMEDIAL ACTION
PROGRAM ENVIRONMENTAL COMPLIANCE
ASSESSMENT CHECKLISTS**

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LIST OF ACRONYMS

Acronym	Definition
BTU	British Thermal Unit
CAA	Clean Air Act
CAC	California Administrative Code
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
CMR	Code of Massachusetts Regulations
COMAR	Code of Maryland Regulations
CSR	Missouri Code of State Regulations
CWA	Clean Water Act
DEP	Connecticut Department of Environmental Protection
DEQ	Oregon Department of Environmental Quality
DEQE	Massachusetts Department of Environmental Quality Engineering
DER	Pennsylvania Department of Environmental Resources
DNR	Michigan Department of Natural Resources
DOE	U.S. Department of Energy
DOHS	California Department of Health Services
DOT	U.S. Department of Transportation
E.O.	Executive Order
EPA	U.S. Environmental Protection Agency
FR	<i>Federal Register</i>
FUSRAP	Formerly Utilized Sites Remedial Action Program
GMP	Good Management Practice
IAC	Illinois Administrative Code
ID	Identification
KG	Kilogram
MDE	Maryland Department of the Environment
MDNR	Missouri Department of Natural Resources

Acronym	Definition
NFPA	National Fire Protection Association
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NJAC	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NY	New York
NYDEC	New York Department of Environmental Conservation
NYCRR	New York Code of Rules and Regulations
OAR	Oregon Administrative Rules
OSHA	Occupational Safety and Health Administration
PA	Public address
PC	Pennsylvania Codes
PCBs	Polychlorinated biphenyls
PPM	Part per million
POTW	Publicly owned treatment works
RCRA	The Resource Conservation and Recovery Act of 1976
RCSA	Regulations of Connecticut State Agencies
SIU	Significant Industrial User
SPCC	Spill Prevention, Cleanup, and Countermeasures Plan
SPDES	State Pollutant Discharge Elimination System
TCLP	Toxicity Characteristic Leaching Procedure
TDHE	Tennessee Department of Health and the Environment
TSCA	Toxic Substance Control Act
TSD	Treatment, storage, and disposal
TSDF	Treatment, storage, and disposal facility

INTRODUCTION

The purpose of the Environmental Compliance Assessment Program is to assess the compliance of Formerly Utilized Sites Remedial Action Program (FUSRAP) sites with applicable environmental regulations and Department of Energy (DOE) Orders. FUSRAP was established by Congress in 1974 and is managed by the U.S. DOE. Its mission is to identify, assess, and decontaminate sites utilized during the 1940s, 1950s, and 1960s to process and store uranium and thorium ores in support of the Manhattan Engineer District and the Atomic Energy Commission. These sites were owned by the Federal government, universities or other institutions, and private companies. Currently, FUSRAP addresses 31 sites in 13 states.

This audit program focuses on those regulations whose attendant liabilities are not otherwise addressed in FUSRAP. Accordingly, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is not addressed. Compliance with CERCLA during the remediation of FUSRAP sites is assured by extensive interactions with EPA and is monitored by DOE Headquarters through the Office of the Assistant Secretary for Environment, Safety, and Health and by the U.S. DOE Oak Ridge Operations Office (ORO). In addition, this audit program does not cover the management and disposal of radioactive waste that is free of chemical contamination. Radioactive waste management is addressed under CERCLA and is hence evaluated in this aspect of FUSRAP.

To conduct the FUSRAP environmental compliance assessment, checklists were developed that outline audit procedures to determine the compliance status of the site. These checklists cover the appropriate sections of Federal regulations associated with the following statutes:

- The Resource Conservation and Recovery Act,
- The Toxic Substances Control Act,
- The Clean Air Act, and
- The Clean Water Act.

The checklist also addresses final DOE Orders. The checklists are divided in four groups to correspond to these regulatory areas: (1) Hazardous Waste Management, (2) PCB Management, (3) Air Emissions, and (4) Water Discharges. Appended to the general checklist are checklists for each of the 13 states in which FUSRAP sites are located. These include California, Connecticut, Illinois, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New Mexico, Oregon, Pennsylvania, and Tennessee. Items within the state checklist are numbered to cross-reference the equivalent item on the general checklist.

The checklists are comprised of four columns. The first column identifies the regulatory requirements and provides the appropriate citations (Federal or state regulation or DOE Order) or indicates that the requirement is simply a good management practice (GMP). Where Column 1 cites an "applicable state regulation," the auditor should consult the appropriate state appendix

for the state requirement. The second column provides instructions to the auditor regarding the proper documents to examine, questions to ask, and facility areas or components to inspect to evaluate compliance with the requirement listed in Column 1. The third and fourth column provide the auditor with space to make comments and note any findings.

These checklists contain federal and state requirements that may be applicable to FUSRAP sites. They should be used to supplement the actual federal and state regulations when conducting an environmental compliance assessment. These checklists do not identify all regulatory requirements and should not be used in lieu of the regulations.

HAZARDOUS WASTE MANAGEMENT

I. Applicable Regulations and Orders

This assessment area applies to FUSRAP sites that generate, treat, store, or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) or applicable state regulations. This assessment area focuses primarily on the following Federal regulations:

- 40 CFR 260 Hazardous Waste Management System: General
- 40 CFR 261 Identification and Listing of Hazardous Waste
- 40 CFR 262 Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263 Standards Applicable to Transporters of Hazardous Waste
- 40 CFR 264 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 265 Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 268 Land Disposal Restrictions
- 40 CFR 270 EPA Administered Permit Programs: The Hazardous Waste Permit Program.

The assessment also focuses on the following DOE Orders:

- Order 1540.2 Hazardous Material Packaging for Transport--Administrative Procedures
- Order 5480.4 Environmental Protection, Safety, and Health Protection Standards (Note: this Order is not referenced explicitly in the checklist; it identifies RCRA as a mandatory Environmental Protection, Safety, and Health Protection standard)
- Order 5484.1 Environmental Protection, Safety, and Health Protection Information Reporting Requirements

II. Key Definitions

The following terms are used in the Hazardous Waste Checklist and are important in determining the compliance status of the site. The definitions provided below are those presented in 40 CFR § 260.10 (Definitions).

Container: Any portable device in which a material is stored, transported, treated, disposed, or

otherwise handled.

Contingency Plan: A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Disposal: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

Generator: Any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR Part 261 or whose act first causes a hazardous waste to become subject to regulation.

Hazardous Waste: A hazardous waste as defined in 40 CFR §261.3.

Leachate: Any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

Liner: A continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

Manifest: The shipping document, EPA Form 8700-22 and, if necessary, 8700-22A, originated and signed by the generator in accordance with the appendix to 40 CFR 262.

Operator: The person responsible for the overall operation of a facility.

Owner: The person who owns a facility or part of a facility.

Pile: Any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage.

Run-off: Any rainwater, leachate, or other liquid that drains over land from any part of a facility.

Run-on: Any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

Small Quantity Generator: A generator who generates less than 1000 kg of hazardous waste in a calendar month.

Storage: The holding of hazardous wastes for a temporary period, at the end of which the hazardous wastes are treated, disposed of, or stored elsewhere.

Tank: A stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Transporter: A person engaged in the offsite transportation of hazardous wastes by air, rail, highway, or water.

Treatment: Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable to storage, or reduced in volume.

III. Assessment Procedures

The auditor will need copies of or access to the following documents in order to assess the compliance of the site with the applicable hazardous waste regulations:

- Last year's Generator Biennial Report (EPA Form 8700-13A) submitted to EPA for waste transported offsite or the state equivalent;
- Copies of any Uniform Hazardous Waste Manifests (EPA Form 8700-22 and, if necessary, 8700-22A)) for offsite shipments;
- Copies of any notifications accompanying wastes prohibited from land disposal;
- Copies of pre-transport procedures for shipping hazardous wastes offsite;
- Copies of any exception reports;
- A list of any 90-day hazardous waste accumulation points and their locations;
- A copy of accumulation point inspection guidelines, schedules, and checklists;
- Training records for accumulation point managers;
- A list of hazardous waste treatment, storage, or disposal units onsite;
- A copy of the permit application for storing hazardous wastes for more than 90 days;
- A copy of the waste analysis plan;
- A copy of the inspection plan;
- A copy of the monitoring and inspection logs;
- A copy of the personnel training plan and training records;
- A copy of the contingency plan and any records on incidents requiring the implementation of the contingency plan;

- Last year's biennial report submitted by TSDF to EPA (EPA Form 8700-13A);
- A copy of operating records;
- A copy of any sampling/monitoring plan;
- Copies of monitoring reports over the past year;
- A copy of the closure and post-closure plans; and
- Any records of communication with the EPA or the state regarding uncertainty about compliance or any alleged violations.

Given the varied characteristics of FUSRAP sites, not all the hazardous waste management requirements listed in the checklist will apply to all sites. To assist the auditor in finding those requirements that are applicable, the following table should be consulted:

<u>If the site:</u>	<u>See Checklist Items</u>
1. generates hazardous waste,	1-3, 58
2. stores hazardous waste at accumulation points for less than 90 days,	4-14, 58
3. transports or offers for transport, hazardous waste onsite or offsite,	15-26
4. has a facility that treats, stores, or disposes of hazardous waste,	27-58
5. has a waste pile,	46-58

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. Facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 262.11 and applicable state regulations; see 40 CFR 260, Appendix I, and 40 CFR 261 for definitions).</p> <p>2. Facilities must notify EPA of their hazardous waste activities and obtain an EPA identification number (40 CFR 262.12(a) and applicable state regulations).</p>	<ul style="list-style-type: none"> ● Determine if there is a master list of the types and quantities of hazardous wastes generated. ● Determine how generated wastes were identified and classified. ● Determine if the facility followed EPA criteria for sampling and analyzing hazardous wastes, as provided in the appendices to 40 CFR Part 261. ● Examine EPA Form 8700-12, "Notification of Hazardous Waste Activity." ● Compare EPA ID numbers of wastes on the EPA Form 8700-12 with the wastes listed on the Master List (Item 1). Record any inconsistencies. ● Determine the facility's EPA Generator Identification Number. ● Confirm that the correct identification number is used on all appropriate documents (e.g., biennial reports, manifests). 		

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<p>3. The generator must test his waste or a waste extract developed using the Toxicity Characteristic Leaching Procedure (40 CFR 268, Appendix I) or use knowledge of the waste to determine if the waste is restricted from land disposal (40 CFR 268.7).</p> <p>4. Hazardous waste may be temporarily stored at accumulation points at the facility for 90 days or less without a permit, provided that certain requirements are met (40 CFR 262.34).</p> <p>5. Hazardous waste that is prohibited from land disposal may be stored in containers or tanks solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal and as long as the requirements of 40 CFR 262.34 are met (as determined during the evaluation of the items below) [40 CFR 268.50(a)(1)].</p> <p>6. Facilities may store as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste in</p>	<ul style="list-style-type: none"> ● Determine if land-banned wastes are generated and if there is a master inventory of such wastes. ● Verify that the waste extracts were analyzed using the TCLP. ● Determine the locations of all hazardous waste accumulation points at the facility. ● Determine if there is a master inventory of the types and quantities of wastes stored at each accumulation point. ● Verify that land-banned wastes are stored for less than 90 days or (1) an extension has been granted from the EPA Regional Administrator per 40 CFR 262.34(b) or (2) the facility has obtained a RCRA permit for storage. ● Determine from interviews and available information the location of each satellite accumula- 		

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<p>satellite accumulation points at or near any point of generation without a permit and without complying with accumulation point requirements, provided certain other requirements are met [40 CFR 262.34(c)].</p>	<p>tion point and its associated point of waste generation.</p> <ul style="list-style-type: none"> ● Inspect each satellite accumulation point and interview the area or site manager to verify that the following requirements are met: <ul style="list-style-type: none"> - the area has no more than 55 gallons of hazardous waste or 1 quart of acutely hazardous waste; - the waste is stored in containers in good condition; - the container is made of or lined with material compatible with the waste; - the container is kept closed; - the container is not handled or stored in a manner that will cause it to leak or rupture; - the container is clearly marked "HAZARDOUS WASTE" or with other words that identify the contents; and 		

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6. Continued	<ul style="list-style-type: none"> - the container is managed by the operator of the process generating the waste. ● Verify that when waste is accumulated in excess of these amounts: <ul style="list-style-type: none"> - the container is marked with the date the excess amount began accumulating; and - the waste is transferred to an accumulation point within 3 days. ● If the waste is not transferred to a designated accumulation point within 3 days, verify that the area complies with the accumulation point standards . 		
7. Hazardous wastes stored at accumulation points in containers and tanks must be properly labeled [40 CFR 262.34(a)].	<ul style="list-style-type: none"> ● Inspect each accumulation point and interview the accumulation point manager. Verify that: <ul style="list-style-type: none"> - each container and tank is clearly labeled and the accumulation start date is recorded; 		

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<p>7. Continued</p> <p>8. Hazardous wastes stored at accumulation points in containers must comply with certain storage regulations contained in 40 CFR 265, Subpart I (40 CFR 262.34).</p> <p>NOTE: If hazardous wastes are not stored in containers at the accumulation point, but rather in tank systems, go to Item 10.</p>	<ul style="list-style-type: none"> - the recorded start date indicates no container or tank has been stored longer than 90 days; and - each container and tank is labeled or marked clearly with the words "HAZARDOUS WASTE." <p>● Inspect the containers and look for the following conditions:</p> <ul style="list-style-type: none"> - containers are closed and in good condition (i.e., not leaking, bulging, rusting, or badly dented); - containers are compatible with waste that they hold (this is particularly important for containers holding strong caustics or acids; verify that solvents are not stored in plastic drums); - containers are closed (check bungs on drums; look for funnels); - containers are handled properly, (look for a drum dolly and bung wrench); 		

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8. Continued	<ul style="list-style-type: none"> - containers stored on top of each other have pallets between them (GMP); - containers of highly flammable wastes are electrically grounded (check for grounding clips and wires and make sure wires actually lead to a grounding rod or system) (GMP); - containers holding ignitable or reactive waste are at least 50 feet from the site property line; - incompatible wastes are not placed in the same container or unwashed containers that previously held incompatible wastes; - containers holding hazardous wastes incompatible with wastes stored nearby in other containers, open tanks, piles, or surface impoundments are separated or protected from each other by a dike, berm, wall or other device; - containers are separated by sufficient aisle space to allow the unobstructed movement of personnel, fire protection 		

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8. Continued	<p>equipment, spill control equipment, and decontamination equipment to any area of the facility (Good management practice dictates that the aisle space is at least as wide as the device (e.g., forklift) used to handle and move containers).</p>		
9. Containers previously holding hazardous wastes may be re-used for other purposes or discarded as a solid waste providing certain requirements are met (40 CFR 261.7).	<ul style="list-style-type: none"> ● Inspect empty containers found at accumulation points that are not labeled as "Hazardous Waste" to verify: <ul style="list-style-type: none"> - all wastes have been removed by pouring, pumping, aspirating or other practice commonly employed to empty that type of container; - no more than one inch of residue remains in the container or inner liner OR no more than 3% by weight of total capacity remains for a container less than or equal to 110 gallons in size or 0.3% for a container greater than 110 gallons in size; - containers holding a hazardous waste that is a compressed gas have a pressure 		

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<p>10. Continued</p> <p>10. Tanks used to store waste at 90-day accumulation points must meet the requirements of 40 CFR 265, Subpart J, except for Sections 265.197(c) and 265.200 [40 CFR 262.34(a)].</p>	<p>approaching atmospheric pressure; and</p> <ul style="list-style-type: none"> - containers holding acutely hazardous wastes are triple rinsed with an appropriate solvent or some other method shown in the scientific literature or by generator analyses to achieve equivalent removal. <ul style="list-style-type: none"> ● For each tank system that does not have secondary containment, examine the written assessment of that tank that attests to its integrity. This assessment must be reviewed and certified by an independent, qualified, registered professional engineer. ● Inspect accumulation points using tank storage. ● Inspect each tank for ruptures, leaks, corrosion, or other signs of failure (dead vegetation, wet spots, etc.). ● Inspect each tank to verify that it: 		

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10. Continued	<ul style="list-style-type: none"> - has spill prevention controls (e.g., check valves, dry discount couplings); - is equipped with overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and - is maintained with sufficient freeboard to prevent overtopping by wave or wind action or precipitation if it is an uncovered tank (two feet of freeboard is recommended as a GMP). <ul style="list-style-type: none"> ● If the generator is a small quantity generator (generates more than 100 kg but less than 1000 kg of hazardous waste in a calendar month), verify that uncovered tanks are operated with at least 2 feet of freeboard unless the tank is equipped with a containment structure, a drainage control system, or a diversion structure with a capacity that equals or exceeds the volume of the top 2 feet of the tank. ● Inspect each continuously fed tank to verify that it is equipped 		

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10. Continued	<p>with a waste feed cut off system or a by-pass system to a standby tank.</p> <ul style="list-style-type: none"> ● Verify that the following tank classes have a secondary containment system designed, installed and operated to prevent any migration of wastes out of the system and that is capable of detecting and collecting releases and accumulated liquids: <ul style="list-style-type: none"> - all new tank systems of components; - all existing tanks used to store EPA Hazardous Wastes F020, F021, F022, F023, F026, and F027; and - all existing tanks that have reached 15 years of age. ● Inspect each tank to ensure that it does not contain ignitable or reactive waste unless: <ul style="list-style-type: none"> - the waste has been treated, rendered or mixed so it is no longer ignitable or reactive; 		

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10. Continued	<ul style="list-style-type: none"> - the waste is stored or treated to protect it from any materials or conditions that may cause it to ignite or react; - the tank is used solely for emergencies. 		
11. Accumulation point managers must conduct regular inspections of their facilities in accordance with written schedules and checklists in 40 CFR 265.174 and 265.195 [40 CFR 262.34(a)].	<ul style="list-style-type: none"> ● Inspect each tank used to store ignitable or reactive wastes to verify that it complies with buffer zone requirements specified in the NFPA's "Flammable and Combustible Liquids Code." ● Verify that incompatible wastes are not stored in the same tank and that wastes are not added to tanks that previously contained incompatible wastes and have not been decontaminated. ● Determine if the facility has inspection guidelines, schedules, and checklists. ● Determine if accumulation point inspections are conducted at least as often as the frequencies specified below: 		

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11. Continued	<ul style="list-style-type: none"> - containers and container storage area (to look for leakage and signs of deterioration) – weekly; - overfill/spill control equipment (e.g., waste feed cut-off systems, bypass systems) – daily; - the aboveground portions of the tank system, if any – daily; - tank monitoring equipment (e.g. pressure and temperature gauges) – daily; - waste levels in uncovered tanks – daily; - all sources of impressed current – bimonthly; - cathodic protection system – annually. 		
12. All accumulation points must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned release of hazardous wastes according to 40 CFR 265.30 - 265.37 (40 CFR 262.34).	<ul style="list-style-type: none"> ● Inspect the accumulation point to determine if the following required equipment is easily accessible and in operating condition: <ul style="list-style-type: none"> - an internal communications or alarm system (e.g., a horn, klaxon, or PA system) 		

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12. Continued	<p>capable of providing immediate emergency instruction to facility personnel (as a GMP, within 10 feet of waste handling areas);</p> <ul style="list-style-type: none"> - a telephone or hand-held two-way radio capable of summoning emergency assistance from local police or fire departments; - portable fire extinguishers and special extinguishing equipment (foam, inert gas, or dry chemicals); - spill control equipment and decontamination equipment; and - water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems. <p>● Interview with site personnel to verify that alarm systems, fire protection equipment, spill control equipment, and decontamination equipment are tested and maintained as necessary to assure their proper use during an emergency. As a good manage-</p>		

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<p>12. Continued</p> <p>13. Each accumulation point must be included in a contingency plan required in 40 CFR 265.50 through 265.56 (40 CFR 262.34 or applicable state regulation).</p> <p>14. Accumulation point managers must successfully complete a training program according to 40 CFR 265.16 (40 CFR 262.34).</p>	<p>ment practice, inspect such equipment to assess its condition.</p> <ul style="list-style-type: none"> ● Verify that security (if available or local police), the local fire department, and hospital personnel are familiar with the facility layout and properties of wastes handled and their hazards. ● Determine if emergency response drills or exercises are held (GMP). ● Accumulation points may be addressed in the facility's contingency plan, or if none exists, in a separate contingency plan. Evaluate the contingency plan according to instruction under Item 36. ● Determine if the site has a training program directly related to the operation of the accumulation points. Determine if the program includes: <ul style="list-style-type: none"> - equipment operations; 		

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14. Continued	<ul style="list-style-type: none"> - contingency plan implementation; and - emergency response procedures, such as: <ul style="list-style-type: none"> - emergency/monitoring, - equipment use, inspection, and repair, - parameters for automatic feed cut-off system, - communications and alarms, - response to fire, explosion, groundwater contamination incidents, and - facility shutdown procedures. ● Examine training records to verify that they include: <ul style="list-style-type: none"> - job title, job description and employee name; - description of the type and amount of training required for each position; - documentation of training completed and annual training reviews; and - a copy of the training plan. 		

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14. Continued	<ul style="list-style-type: none"> ● Determine if training records are maintained for at least 3 years after a person's employment has ceased or until the facility is closed. 		
15. A facility must not offer its hazardous waste to transporters or to TSD facilities that have not received an EPA identification number [40 CFR 262.12(c) or applicable state regulation].	<ul style="list-style-type: none"> ● Verify that all transporters and TSD facilities used have a current EPA ID number. 		
16. A facility that transports hazardous wastes off-site must prepare a manifest before transporting the waste off-site (40 CFR 262.20 or applicable state regulation).	<ul style="list-style-type: none"> ● Check manifests for the following items: <ul style="list-style-type: none"> - manifest document number; - name, address, telephone number, and EPA ID number of the site, transporter, TSD facility, and alternate TSD facility (if any); - waste information (shipping description, hazard class, quantity, and units); - emergency information (immediate response information, special handling instructions, phone number); 		

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<p>16. Continued</p>	<ul style="list-style-type: none"> - certification which states: "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable regulations of DOT and EPA "; - unless exempt by statute or regulation, certification that the facility has in place a program to minimize the volume and toxicity of waste to the extent economically practical; and - the hand written signature of the initial transporter and date of acceptance of the manifests. 		
<p>17. If wastes that are restricted from land disposal do not meet the applicable treatment standards in 40 CFR 268, Subpart D or exceeds the applicable prohibition levels in 40 CFR 268.32, the generator must send a written notification with each waste shipment sent to the treatment or storage facility (40 CFR 268.7 or applicable state regulation).</p>	<ul style="list-style-type: none"> ● Determine if any land-banned wastes that do not meet the applicable treatment standards or exceed the applicable prohibition levels have been shipped to a treatment or storage facility. ● Verify that a written notification is attached to the manifest and contains the following information: 		

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<p>17. Continued</p>	<ul style="list-style-type: none"> - the applicable treatment standard and any applicable prohibition levels; - EPA Hazardous Waste number; - treatment standard for the waste; - manifest number associated with the shipment; and - waste analysis results where available. 		
<p>18. If land-banned wastes can be disposed without further treatment, the generator must submit with each waste shipped to the treatment, storage, or disposal facility a certification stating that the waste meets applicable treatment standards or applicable prohibition levels (40 CFR 268.7).</p>	<ul style="list-style-type: none"> ● Determine if any land-banned wastes that meet the treatment standards or prohibition levels have been shipped to a treatment, storage, or disposal facility. ● Verify that the proper certification was attached to the manifest and contains the following information: <ul style="list-style-type: none"> - A statement that the waste meets the applicable treatment standards set forth in 40 CFR 268, Subpart D, and the applicable prohibition levels set forth in 40 CFR 		

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18. Continued	<p>268.32 or RCRA Section 3004(d);</p> <ul style="list-style-type: none"> - EPA Hazardous Waste number; - treatment standard for the waste; - manifest number associated with the shipment; and - waste analysis results, where available. 		
19. Facilities must keep copies of manifests and certain records and reports for at least 3 years (40 CFR 262.40 or applicable state regulation).	<ul style="list-style-type: none"> ● Examine records for a period of 3 years prior to the date of the assessment; check for copies of: <ul style="list-style-type: none"> - manifests and/or signed copies from designated facilities that received the waste; - copies of the Biennial Report (see also Item 21 below); - exception reports (filed when the facility does not receive a signed copy of the manifest within 45 days from the date it was initially shipped), including a copy of 		

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<p>19. Continued</p> <p>20. Generators who ship offsite waste that are prohibited from land disposal must retain onsite a copy of all notices, certifications, demonstrations, waste analysis data, and other such documents for at least 5 years from the date when waste was shipped [40 CFR 268.7(a)(6)].</p> <p>21. Generators must submit a Biennial Report (EPA Form 8700-13A) listing all offsite waste shipments sent to a TSD facility to the EPA Regional Administrator by March 1 of each even numbered year (40 CFR 262.41 or applicable state regulation).</p> <p>22. Before transporting hazardous waste or offering hazardous waste for transport off-site, the facility must meet certain pre-transport requirements (40 CFR 262.30 through 262.33).</p>	<p>manifest and letter of explanation;</p> <ul style="list-style-type: none"> - records of test results, waste analyses, or other determinations. ● Examine records for a period of 5 years prior to the date of the assessment; check for copies of notifications, certifications, waste analysis data, and any exception reports associated with land-banned wastes. ● Check Biennial Report for completeness and timely submission. ● Obtain pre-transport procedures for hazardous waste. ● Inspect sample containers awaiting transport. 		

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22. Continued	<ul style="list-style-type: none"> ● Verify that containers are properly constructed and exhibit no leaks, corrosion, or bulges. ● Verify that the waste is packaged in accordance with DOT regulations contained in 49 CFR Parts 173, 178, and 179. ● Inspect a random sample of containers of 110 gallons or less to confirm that the following information is displayed in accordance with 49 CFR 172.304: <ul style="list-style-type: none"> - "HAZARDOUS WASTE – Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority of the U.S. Environmental Protection Agency"; - generator's name and address; - manifest document number. 		
23. DOE personnel and contractors shall ensure that packaging for hazardous wastes constructed in accordance with the DOT	<ul style="list-style-type: none"> ● Verify that all packaging procured from commercial sources are certified by the manufac- 		

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<p>specifications meet the current requirements (DOE Order 1540.2)</p> <p>24. Small quantity generators of hazardous waste must comply with requirements that cover the transportation and disposal of hazardous waste (40 CFR 262.44 or applicable state regulation).</p>	<p>turer that the packaging meets all applicable specifications.</p> <ul style="list-style-type: none"> ● Ensure that adequate documentation is developed and maintained for new specifications packaging constructed for DOE or DOE contractor personnel. ● Determine if the facility is a small quantity generator of hazardous waste, meaning they generate more than 100 kg (200 lbs) but less than 1,000 kg in a calendar month. If so, verify that manifests, records of test results, waste analyses, or other determinations are kept for 3 years. No biennial report is required. ● Determine that small quantity generators: <ul style="list-style-type: none"> - store hazardous waste no more than 180 days without a permit; or - store hazardous waste for no more than 270 days without a permit if waste must be transported more than 200 miles, and no more than 6,000 kg is stored; and 		

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24. Continued	<ul style="list-style-type: none"> - treat, store, and dispose of their waste at an EPA or state authorized hazardous waste facility. 		
25. Transporters of hazardous waste must meet certain requirements (40 CFR 263 or applicable state regulation).	<ul style="list-style-type: none"> ● Determine if transport vehicles have an EPA or authorized state transporter Identification Number and are placarded with DOT information. 		
26. Facilities should ensure that transportation of hazardous waste between buildings is accomplished in accordance with good management practices to help ensure against spills, releases, and accidents.	<ul style="list-style-type: none"> ● Determine if procedures exist to manage movement of hazardous wastes throughout the facility. ● Determine if drivers are trained in spill control procedures. ● Determine if provisions have been made for securing wastes in vehicles when transporting. 		
27. As a good management practice, a master listing of all hazardous waste TSD facilities should be maintained at the site.	<ul style="list-style-type: none"> ● Determine the locations of all the hazardous waste TSD facilities at the site. 		
28. A generator who stores hazardous wastes for longer than 90 days is an operator of a storage facility and must have a RCRA permit [40 CFR	<ul style="list-style-type: none"> ● Examine RCRA Part A Interim Status and/or Part B permit applications and any draft or final RCRA permits. 		

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<p>262.34(b) or applicable state regulation].</p> <p>29. Detailed chemical and physical analyses of a representative sample of hazardous waste must be obtained prior to treatment, storage or disposal (40 CFR 265.13).</p>	<ul style="list-style-type: none"> ● If a RCRA permit is available, review the permit for specific operating/reporting requirements and use the permit and this checklist to conduct the compliance assessment. ● Through interviews with site personnel, determine the nature of any problems or Notice of Deficiencies with permit applications or any negotiations between the facility and the EPA/state. ● Determine if a written waste analysis plan exists that specifies procedures for determining waste characteristics. ● If a written plan does not exist, determine how the contents of each container or tank and the nature of wastes contained are determined (e.g., from manifests, published documented data on waste or waste source, etc.) and who is responsible for determining waste characteristics and preparing certification of waste content. 		

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29. Continued	<ul style="list-style-type: none"> ● Determine if chain of custody forms are maintained for sample containers. 		
30. Sites with TSD facilities must control entry to the active portion of each facility (40 CFR 265.14).	<ul style="list-style-type: none"> ● Inspect each TSD facility at the site. Verify the following: <ul style="list-style-type: none"> - the facility has a 24-hour surveillance system (e.g. television monitors, surveillance by guards, motion detectors) in place and in operation; OR - the facility is surrounded by a fence or natural barrier that completely surrounds the active portion of the facility and has a means to control entry through entrances to the active portion of the facility at all times; - each entrance to the active portion of the facility is posted with signs saying "Danger - Unauthorized Personnel Keep Out". 		
31. Permitted TSD facilities at the site must have formal written inspection procedures as part of the hazardous waste management plan (40	<ul style="list-style-type: none"> ● Examine TSD Inspection Plan. Verify that the frequency of inspections are done at a minimum, as follows: 		

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CFR 265.15 or applicable state regulation).	<ul style="list-style-type: none"> - containers - weekly; - storage tanks - daily; - loading areas - daily; - treatment tanks - daily; - surface impoundments - daily; - incinerators - daily; - thermal treatment facilities - daily; and - chemical, physical, biological treatment facilities - daily. <p>● Conduct an inspection of the TSD facility with the operator. Inspect the following equipment to determine if it is in proper working condition:</p> <ul style="list-style-type: none"> - monitoring equipment; - safety and emergency equipment; - security devices; and - operating and structural equipment. 		

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<p>32. TSD facilities must record inspections in a log with specific entries [40 CFR 265.15(d)].</p>	<ul style="list-style-type: none"> ● Examine the TSD inspection log and verify that inspection logs are retained for at least 3 years from the date of inspection. ● Verify that entries include at a minimum: <ul style="list-style-type: none"> - the date and time of the inspection; - the name of the inspector; - a notation of observations; and - the date and nature of any repairs or other remedial actions. 		
<p>33. All site personnel who work in a permitted TSD facility must meet certain training requirements (40 CFR 265.16).</p>	<ul style="list-style-type: none"> ● Through interviews with TSD managers and a review of training records, determine if a formal training program is in place that includes, at a minimum the following: <ul style="list-style-type: none"> - contingency plan implementation; - procedures for using, inspecting, and repairing TSD 		

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33. Continued	<p>facility emergency and monitoring equipment;</p> <ul style="list-style-type: none"> - procedures for operating automatic waste feed cut-off systems; - operation of communications and alarm systems; - response to fire or explosion; - response to groundwater contamination incidents; and - procedures for shutting down operations. 		
34. Owners and operators must maintain certain documents regarding personnel training at the TSD facility [40 CFR 265.16(d)].	<ul style="list-style-type: none"> ● Verify that training records contain the following information: <ul style="list-style-type: none"> - the job title for each position at the facility related to hazardous waste management and the name of the employee filling that position; - a written job description for each position listed, including the requisite skill, education, or other qualifications and duties of the employee assigned to each position; 		

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34. Continued	<ul style="list-style-type: none"> - a written description of the type and amount of both introductory and continuing training that will be given to each person filling a listed position; and - documentation of training received by each employee. <ul style="list-style-type: none"> ● Determine if each employee's training is updated as necessary. ● Verify that training records on current employees are kept until closure of the facility and records on former employees are retained for 3 years from the date the employee last worked at the facility. 		
35. All TSD facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned release of hazardous waste (40 CFR 265, Subpart C or applicable state regulation).	<ul style="list-style-type: none"> ● Inspect the TSD facility to determine if the following required equipment is easily accessible and in operating condition: <ul style="list-style-type: none"> - internal communications or alarm system (e.g., a horn, klaxon, or PA system) capable of providing immediate emergency instruction to facility personnel (as a 		

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35. Continued	<p>GMP, within 10 feet of waste handling areas);</p> <ul style="list-style-type: none"> - a telephone or hand-held two-way radio capable of summoning emergency assistance from local police or fire departments; - portable fire extinguishers and special extinguishing equipment (foam, inert gas, or dry chemicals); - spill control equipment and decontamination equipment; and - water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems. <ul style="list-style-type: none"> ● Interview with site personnel to verify that alarm systems, fire protection equipment, spill control equipment, and decontamination equipment are tested and maintained as necessary to assure their proper use during an emergency. As a good management practice, inspect such equipment to assess its condition. 		

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<p>35. Continued</p> <p>36. Sites with TSD facilities must have a contingency plan (40 CFR 265, Subpart D or applicable state regulation).</p> <p>NOTE: TSD Facilities may be addressed in the site's Spill Prevention, Control, and Countermeasures Plan or other emergency plan, or if none exists, in a separate contingency plan.</p>	<ul style="list-style-type: none"> ● Determine that security (if available or local police), the local fire department, and hospital personnel are familiar with the facility layout and properties of wastes handled and associated hazards. ● Determine if emergency response drills or exercises are held (GMP). ● Review the Contingency Plan and verify that separate sections of the plan identify actions/procedures in response to fire, explosion, and the release of hazardous waste. ● Verify that the plan describes arrangements agreed to by the following local organizations: <ul style="list-style-type: none"> - police departments; - fire departments; - hospitals; - contractors; and - state and local emergency response teams. 		

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36. Continued	<ul style="list-style-type: none"> ● Verify that the plan lists names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators and that this list is kept current. ● Verify that the plan lists all emergency equipment at the facility and provides the location, a physical description, and a brief outline of the capabilities of each item on the list. ● Inspect the facility to verify that emergency equipment listed in the plan is consistent with what is found in the TSD facility, including: <ul style="list-style-type: none"> - fire extinguishers; - spill control equipment; - alarm systems; and - decontamination equipment. ● Determine if evacuation procedures and routes for facility personnel are necessary and included in the plan. The plan 		

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36. Continued	<p>should describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.</p> <ul style="list-style-type: none"> ● Verify that copies of the contingency plan are maintained at the TSD facility and also have been submitted to the following: <ul style="list-style-type: none"> - local police department; - local fire department; - local hospitals; and - state and local emergency response teams. ● Determine if the contingency plan is routinely reviewed and updated as mandated by changes in applicable regulations, modifications in facility design or operation, or the failure of the plan during an emergency. 		
37. As a good management practice, contingency plans should have specific procedures for responding to spills and accidents.	<ul style="list-style-type: none"> ● Examine the contingency plan for the following good management practices: 		

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37. Continued	<ul style="list-style-type: none"> - the chemical involved is determined (including, if possible, formulation, manufacturer, and percent active ingredient); - immediate first aid is provided and personnel around spill area are evacuated; - the spill site is secured by roping off the area and posting warning signs; - the spill is contained and controlled by preventing further leakage, covering any liquids with absorbent material, wrapping solids with polyethylene bags, encircling the spill area with a dike of sand, absorbent material, soil or rags; - decontamination procedures are outlined (e.g., remove the bulk of the spill, apply decontamination solution, allow 1 to 6 hours reaction time, apply absorbent material, dispose of any used materials); - disposal procedures are outlined (e.g., remove all contaminated materials and 		

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37. Continued	<p>place in a sealed leak-proof drum and dispose of drum in same manner as waste);</p> <ul style="list-style-type: none"> - post-spill procedures are provided (e.g., sample affected areas to ensure effective decontamination); and - the cause of the spill is investigated. 		
38. Each TSD facility should have an emergency coordinator on the facility premises or on call at all times (40 CFR 265.55).	<ul style="list-style-type: none"> ● Determine that, at all times, there is at least one employee at the facility or on call with responsibility for coordinating all emergency response measures. ● Verify that the emergency coordinator is thoroughly familiar with the facility, the characteristics of the waste handled, and the provisions of the contingency plan. In addition, verify that the emergency coordinator has the authority to commit the resources needed to carry out the contingency plan (GMP). 		
39. TSD facility emergency coordinators must follow certain emergency procedures whenever there is an imminent or actual emergency situation (40 CFR 265.56).	<ul style="list-style-type: none"> ● Verify that the contingency plan requires the emergency coordinator to perform the following emergency procedures: 		

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39. Continued	<ul style="list-style-type: none"> - immediately activate internal facility alarms or communication systems; - notify appropriate state and local agencies; - identify the character, exact source, amount and areal extent of any released materials; - assess possible hazards to human health or the environment, including direct and indirect effects (e.g. release of gases, surface run-off from water or chemicals used to control fire or explosions, etc.); - take all reasonable measures necessary to ensure that the emergency situation does not occur, recur, or spread to other hazardous wastes at the facility; - stop processes and operations at the facility, if necessary, and then monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment whenever appropriate; 		

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39. Continued	<ul style="list-style-type: none"> - provide for treating, storing, and disposing of recovered waste and any other contaminated material; - notify EPA and appropriate state and local authorities when cleanup is complete and operation resumes; and - note in the operating record the time, date, and details of any incident that required the implementation of the contingency plan. 		
40. TSD facility operators must keep written operating records at the facility (40 CFR 265.73 and 265.74 or applicable state regulation).	<ul style="list-style-type: none"> ● Review the operating records for the TSD facility to determine if they include: <ul style="list-style-type: none"> - description, quantity, and date of placement for each shipment of waste received and the methods and dates of its treatment, storage, or disposal at the facility; - location of each waste within the facility and the quantity at each location; - records and results of waste analyses and trial tests; 		

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40. Continued	<ul style="list-style-type: none"> - summary reports and details of all incidents; - records and results of inspections; and - monitoring, testing and analytical data (where required). - NOTE: This information must be recorded and maintained in the operating record until closure of the facility. 		
41. Sites with TSD facilities must prepare and submit a single copy of a Biennial Report to the EPA Regional Administrator by March 1 of each even numbered year (40 CFR 265.75 or applicable state regulation).	<ul style="list-style-type: none"> ● Obtain a copy of the biennial report and verify that it contains the following information: <ul style="list-style-type: none"> - EPA Identification Number; - facility name and address; - calendar year covered by report; - description and quantity of each waste received; - method of treatment, storage, or disposal for each waste; 		

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<p>41. Continued</p>	<ul style="list-style-type: none"> - most recent closure cost estimate; - EPA identification number for each hazardous waste generator from which waste was received, unless the TSD is at the same site as the generator; - description of changes in volume and toxicity of waste actually achieved during the treatment; and - certification signed by owner or operator of the facility. 		
<p>42. An owner or operator of a TSD facility can only store wastes prohibited from land disposal in tanks or containers and solely for the purpose of the accumulation of sufficient quantities necessary to facilitate proper recovery, treatment, and disposal. Certain storage requirements must be satisfied [40 CFR 268.50(a)(2)].</p>	<ul style="list-style-type: none"> ● Verify that each container of land-banned waste is clearly marked to identify its contents and the date each accumulation period begins. ● Verify that each tank containing land-banned wastes is clearly marked with a description of its contents, the quantities of each hazardous waste received, and the date each accumulation period begins or that such information is recorded and maintained in the operating record at the facility. 		

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<p>43. An owner or operator of a treatment, storage, or disposal facility may store land-banned wastes for up to 1 year unless the EPA can demonstrate that such storage was not solely for the purpose to accumulate sufficient quantities of hazardous waste to facilitate proper recovery, treatment, or disposal [40 CFR 268.50(b)].</p>	<ul style="list-style-type: none"> ● Verify that land-banned waste is stored for less than 1 year. - NOTE: Land-banned wastes may be stored for more than 1 year, but after that time, the facility assumes the burden of proving that such storage is solely for the purpose of accumulating sufficient quantities of waste to facilitate the proper recovery, treatment, or disposal of the waste. 		
<p>44. Sites with hazardous waste facilities that use tank systems to treat or store hazardous waste must comply with regulations to prevent any migration of wastes or accumulated liquid to the soil, ground water, or surface water (40 CFR 265.190 - 265.201).</p>	<ul style="list-style-type: none"> ● Determine if the site treats or stores hazardous wastes in tanks. ● Conduct an inspection of each tank for ruptures, leaks, corrosion, or other signs of failure (dead vegetation, wet spots, etc). ● Inspect each uncovered tank to verify that it is operated with sufficient freeboard. ● Check each tank that does not have secondary containment to verify: 		

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44. Continued	<ul style="list-style-type: none"> - integrity assessment reviewed and certified by an engineer; - documentation of age of tank; - design and strength is adequate and compatible with wastes stored; - corrosion protection measures (e.g., coating cathodic protection); and - leak test results. <p>● Check each tank system with a secondary containment to ensure that the following exist:</p> <ul style="list-style-type: none"> - one or more liners (external to the tank), a vault, a double-walled tank, or an equivalent device as approved by the Regional Administrator. - capacity for detecting and collecting releases and accumulated liquids until removed; - construction or lining materials are compatible 		

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44. Continued	<p>with wastes and of sufficient strength;</p> <ul style="list-style-type: none"> - adequate base or foundation to support secondary containment system; - leak detection system (detection within 24 hours); and - design for draining and removing spills from secondary surrounding system within 24 hours. <ul style="list-style-type: none"> ● Inspect each covered tank used to treat or store ignitable or reactive wastes to ensure it complies with buffer zone requirements specified in the NFPA's "Flammable and Combustible Liquids Code." ● Inspect tanks to ensure they do not contain ignitable or reactive waste unless: <ul style="list-style-type: none"> - the waste has been treated, rendered or mixed so it no longer is ignitable or reactive; - the waste is stored or treated to protect it from any materials or conditions that 		

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44. Continued	<p>may cause it to ignite or react; and</p> <ul style="list-style-type: none"> - the tank is used solely for emergencies. 		
45. Sites must conduct inspections of tank systems and associated equipment.	<ul style="list-style-type: none"> ● Determine if inspections are conducted at least as often as the frequencies shown below: <ul style="list-style-type: none"> - waste feed cut-off systems and by-pass systems – daily; - tank monitoring equipment (e.g. pressure and temperature gauges) – daily; - waste levels in uncovered tanks – daily; - above ground tank integrity (for signs of corrosion, erosion, leakage of fixtures seams) – weekly; - area surrounding tank for signs of leakage (wet spots, dead vegetation – weekly; - areas subject to spills, such as loading and unloading areas – daily when in use. 		

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<p>45. Continued</p> <p>46. Waste piles that are subject to dispersal by wind must be covered or otherwise managed to control wind erosion (40 CFR 264.250(f) and 265.251).</p> <p>47. New waste piles under a RCRA permit and replacement piles and lateral extensions of existing waste piles that are within the area identified in the Part A permit application plus waste received beginning May 8, 1985, are subject to the requirements for liners and leachate collection systems (40 CFR 264.251 and 265.254).</p>	<ul style="list-style-type: none"> ● Determine if there is a written procedure and schedule for emptying and inspecting the tank for cracks, leaks or corrosion on the sides or bottom. (Frequency must be based on type of tank, type of corrosion protection used, waste characteristics, etc.). ● Inspect any waste piles and insure that they are covered or otherwise managed to prevent wind dispersal. ● Determine if wastes have been received after May 8, 1985, if new piles have been constructed, or if existing piles have been replaced or laterally extended. ● Verify that liners were installed and that the liner was: <ul style="list-style-type: none"> - constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste or leachate, climatic conditions, the stress of installa- 		

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47. Continued	<p>tion, and the stress of daily operation;</p> <ul style="list-style-type: none"> - placed upon a foundation or base capable of supporting it and resisting pressure gradients; and - installed to cover all surrounding earth likely to be in contact with the waste or leachate. <p>● Verify that a leachate collection and removal system was installed immediately above the liner and that it was:</p> <ul style="list-style-type: none"> - constructed of materials that are chemically resistant to the waste and leachate and of sufficient strength and thickness to prevent collapse; and - designed and operated to function without clogging. <p>● Determine if the facility has been exempted from the requirements for liners and leachate collection systems by the EPA Regional Administrator per 40 CFR 264.251(b).</p>		

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<p>48. Waste piles must have run-on control systems capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm (40 CFR 264.251(c) and 265.253 for interim status facilities with piles having leachate or runoff that is a hazardous waste).</p> <p>49. Waste piles must have run-off management systems capable to collect and control at least the volume arising from a 24-hour, 25-year storm (40 CFR 264.251(d) and 265.253 for interim status facilities with piles having leachate or runoff that is a hazardous waste).</p> <p>50. Waste piles that are inside or under a structure that provides protection from precipitation so that neither runoff nor leachate is generated is not subject to run-on and run-off control requirements as long as certain conditions are met (40 CFR 264.250).</p>	<ul style="list-style-type: none"> ● Verify that a run-on control system has been installed and is capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm as required. ● Verify that the collection and holding facilities are properly maintained. ● Verify that: <ul style="list-style-type: none"> - liquids or materials containing free liquids are not placed in the pile; - the pile is protected from surface water run-on; - the pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and 		

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<p>50. Continued</p> <p>51. Waste piles must be inspected weekly and after storms to detect evidence of any deterioration, malfunction, or improper operation of run-on/run-off collection systems or wind dispersal systems and the presence of leachate in the leachate collection system (40 CFR 264.254).</p> <p>52. For facilities with interim status, a representative sample of waste from each incoming movement of waste must be analyzed before the waste is added to any existing pile to prevent inadvertent mixing of incompatible wastes (40 CFR 265.252).</p> <p>53. Incompatible wastes may be placed in the same pile if 40 CFR 264.17/265.17 is complied with [40 CFR 264.257(a) and 265.257(a)].</p>	<ul style="list-style-type: none"> - the pile will not generate leachate through decomposition or other reactions. ● Verify that the collection systems are inspected weekly and after storm events. ● Verify that wastes are analyzed prior to their addition to the pile, unless the facility only receives compatible wastes. ● If incompatible wastes are placed in the same pile, verify the following: <ul style="list-style-type: none"> - no fire, explosions, or violent reactions have occurred; - no extreme heat or pressure is generated; 		

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53. Continued	<ul style="list-style-type: none"> - no uncontrolled toxic mists, fumes, dusts, or gases are produced in sufficient quantities to threaten human health; - no uncontrolled flammable fumes or gases are produced in sufficient quantities to pose a risk of fire or explosion; - no damage to the structural integrity of the device or facility containing the wastes occurs; and - no other such conditions occur that threaten human health or the environment. 		
54. A pile of hazardous waste that is incompatible with any waste or material stored nearby must be separated from the other waste or material or protected from them by means of a dike, berm, wall, or other device [40 CFR 264.257(b) and 265.257(b)].	<ul style="list-style-type: none"> ● Verify that any piles that are incompatible with any waste or material stored nearby are separated from the other waste or material or protected from them by means of a dike, berm, wall, or other device. 		
55. Hazardous waste must not be piled on the same area where incompatible wastes or materials were previously pile, unless certain re-	<ul style="list-style-type: none"> ● Verify that wastes were not piled on areas previously contaminated by incompatible wastes. 		

REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>quirements are met [40 CFR 264.257(c) and 265.257(c)].</p> <p>56. Ignitable or reactive hazardous wastes must not be placed in a pile unless certain requirements are satisfied (40 CFR 264.256 and 265.256).</p> <p>57. Certain hazardous wastes must not be placed in waste piles (40 CFR 264.259).</p>	<p>● Verify that decontamination of any such area was sufficient to ensure that compliance with 40 CFR 264.17(b) or 40 CFR 265.17(b) (see 54 above).</p> <p>● Verify that:</p> <ul style="list-style-type: none"> - the addition of ignitable or reactive wastes to an existing pile renders the waste mixture no longer ignitable under 40 CFR 261.21 or reactive under 40 CFR 261.23 and complies with 40 CFR 264.17(b)/265.17(b); or - the waste is managed in such a way that it is protected from any material or conditions that may cause it to ignite or react. <p>● Verify that F020, F021, F022, F023, F026, and F027 hazardous wastes are not placed in waste piles that are not enclosed unless the owner or operator operates the waste pile in accordance with a management plan approved by the EPA Regional Administrator.</p>		

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<p>58. DOE Headquarters Emergency Operations Center must be notified if the following occur as soon as sufficient information is obtained to indicate the nature and extent of the occurrence (DOE Order 5484.1)</p>	<ul style="list-style-type: none"> ● Determine if any of the following incidents have occurred in the past year. <ul style="list-style-type: none"> - Any accidental releases of pollutants which results or could result in significant effect on the public or on the offsite environments (e.g., need to relocate people, substantial fish kill, requirements for corrective action, requests that downstream water supply intakes be shut down); or - Any accidental releases of pollutants designated by the EPA as "hazardous" and requiring activation of National Oil and Hazardous Substances Pollution Contingency Plan in order to respond to the release. 		

PCB MANAGEMENT

I. Applicable Regulations and Orders

This assessment area applies to any FUSRAP site that uses, stores, or disposes of polychlorinated biphenyls (PCBs) or PCB items as defined by the Toxic Substances Control Act (TSCA). This assessment area focuses on the Federal regulations contained in 40 CFR 761 (Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions).

The assessment also addresses DOE Order 5480.4, "Environmental Protection, Safety, and Health Protection Standards," which is not referenced explicitly in the checklist but identifies TSCA as a mandatory Environmental Protection, Safety, and Health Protection standard.

II. Key Definitions

The following terms are used in the PCB Management Checklist and are important in determining the compliance status of the site. The definitions provided below are those presented in 40 CFR § 761.3 (Definitions).

Capacitor: A device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. A "Large High Voltage Capacitor" is a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates at 2,000 volts (a.c. or d.c.) or above. A "Large Low Voltage Capacitor" is a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates below 2,000 volts (a.c. or d.c.).

In or near commercial buildings: Within the interior of, on the roof of, attached to the exterior wall of, in the parking area serving, or within 30 meters of a non-industrial non-substation building. Commercial buildings are typically accessible to both members of the general public and employees.

Incinerator: An engineered device using controlled flame combustion to thermally degrade PCBs and PCB Items.

Leak or leaking: Any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.

Marked: The marking of PCB Items and PCB storage areas and transport vehicles by means of applying a legible mark by painting, fixation of an adhesive label, or by any other method that meets the requirements of 40 CFR 761.

PCB or PCBs: Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

PCB Article: Any manufactured article, other than a PCB Container, that contains PCBs and whose surface(s) has been in direct contact with the PCBs. "PCB Article" includes capacitors,

transformers, electric motors, pumps, and pipes.

PCB Container: Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB Articles and whose surface(s) has been in direct contact with PCBs.

PCB Item: Any PCB Article, PCB Article Container, PCB Container, or PCB Equipment, that deliberately or unintentionally contains or has a part of it in any PCB or PCBs.

PCB Transformer: Any transformer that contains 500 ppm PCB or greater.

PCB Contaminated Electrical Equipment: Any electrical equipment, including transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable, that contain 50 ppm or greater PCB, but less than 500 ppm PCB. Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-Contaminated Electrical Equipment.

Posing an exposure risk to food or feed: Being in any location where human food or animal feed products could be exposed to PCBs released from a PCB Item.

Storage for disposal: Temporary storage of PCBs that have been designated for disposal.

III. Assessment Procedures

The auditor will need copies of or access to the following documents in order to assess the compliance of the site with the applicable PCB regulations:

- An inventory of PCB Transformers used in production or stored onsite, including information on the nature of use, reason for storage, volume, concentration, and plans for disposal;
- Last year's inspection records for PCB Transformers;
- Last year's PCB Annual Report; and
- Records of communication with the EPA or the state regarding uncertainty about compliance or any alleged violations.

Given the varied characteristics of FUSRAP sites, not all the PCB requirements listed in the checklist will apply to all sites. To assist the auditor in finding those requirements that are applicable, the following table should be consulted:

If the site:

See Checklist Items

1.	has PCB Transformers,	1-10, 15-19, 21-27
2.	has heat transfer or hydraulic systems
containing PCBs,	11, 15-19, 21-27
3.	has electromagnets, switches, or voltage
regulators containing PCBs,	12, 16-19, 21-27
4.	has capacitors containing PCBs,	13, 16-19, 21-27
5.	has circuit breakers, reclosers, or
cable containing PCBs,	14, 16-19, 21-27

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<p>1. Facilities that use or store at any time at least 45 kg (99.4 lbs) of PCBs contained in PCB Containers or one or more PCB Transformers or 50 or more PCB Large High Voltage Capacitors must have an annual report on site by July 1 to cover the preceding calendar year (40 CFR 761.180).</p> <p>Note: This report does not have to be submitted to EPA. It must be prepared annually and be available upon request.</p>	<ul style="list-style-type: none"> ● Examine the latest PCB annual report and verify that it contains the following information: <ul style="list-style-type: none"> - dates when PCBs and PCB Items were removed from service, placed into storage, and placed into transport for disposal, broken down as (1) the total weight of any PCBs or PCB Items in PCB Containers, (2) the total number and weight of PCB Transformers and total weight of any PCBs contained in the transformers, and (3) the total number of PCB Large High or Low Voltage Capacitors; - the name of the owner/operator of the initial disposal or storage facility where all PCBs and PCB Items were taken and the facility's location; and - a list of PCBs and PCB Items remaining in-service at the end of the calendar year. ● Verify that the Annual Reports are retained for 5 years after the facility ceases using or storing 		

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<p>1. Continued</p> <p>2. An inventory must be conducted to identify the location of PCB Transformers. This inventory will serve as the basis for the annual report required pursuant to 40 CFR 761.180 (GMP).</p> <p>3. Inspections must be performed for all PCB Transformers (greater than 500 ppm PCB) in service or</p>	<p>PCBs and PCB Items in the prescribed quantities.</p> <ul style="list-style-type: none"> ● Examine the PCB Inventory. ● Identify the criteria and scope for PCB Transformer inventory (i.e., nameplate survey, pad-mounted, pole-mounted, dielectric fluid analyses). ● Inspect a sample of transformers to determine if any PCB Transformers exist that are not included in the inventory. Include PCB Transformers in-service and those stored for reuse. ● Verify that combustible materials have been removed from the area within a PCB Transformer enclosure (i.e., vault or partitioned area) and the area within 5 meters of a PCB Transformer or PCB Transformer enclosure pursuant to 40 CFR 761.30(a)(1)(viii). ● Review inspection records to verify that applicable transformers are inspected at least once every 3 months. 		

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<p>stored for reuse [40 CFR 761.30(a)(1)(ix) and (xiii)].</p> <p>Note: A reduced visual inspection frequency of at least once every 12 months is permitted for PCB Transformers that have impervious, undrained secondary containment capacity of 100% of the dielectric fluid or PCB Transformers that have been tested and found to contain less than 60,000 ppm PCBs.</p> <p>4. PCB Transformer inspection records must include certain information [40 CFR 761.30 (a)(1)(xii)].</p>	<ul style="list-style-type: none"> ● Determine if the following information is recorded for each PCB Transformer inspection: <ul style="list-style-type: none"> - location of transformer; - date of inspection; - date when any leak was discovered; - name of person conducting inspection; - location and estimate of the dielectric fluid quantity for any leaks; - date and description of any cleanup, containment, or repair; and 		

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4. Continued	<ul style="list-style-type: none"> - results of any daily inspections for transformers with uncorrected active leaks. 		
5. PCB Transformers inspection records must be maintained for at least 3 years after disposing of a transformer [40 CFR 761.30 (a)(1)(xii)].	<ul style="list-style-type: none"> ● Verify that PCB Transformer inspection records are retained for periods of useful life , storage for disposal, and at least 3 years after disposal. 		
6. PCB Transformers that are leaking must be repaired or replaced to eliminate the source of the leak [40 CFR 761.30(a)(1)(x)].	<ul style="list-style-type: none"> ● Determine whether any PCB Transformers have leaked. ● Verify that cleanup and/or containment of released PCBs has been initiated within 48 hours of its detection. ● Verify that leaking PCB Transformers are inspected daily and determine if plans exist to remove such transformers to eliminate the source of the leak. 		
7. PCB Transformers in use or in storage for reuse that pose an exposure risk to food and feed are prohibited [40 CFR 761.30 (a)(1)(i)].	<ul style="list-style-type: none"> ● Review the inventory of PCB Transformers and verify that no PCB Transformer in use or in storage for reuse poses a threat of exposure to food and feed. 		

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<p>8. PCB Transformers that are in use in or near commercial buildings are subject to certain requirements [40 CFR 761.30(a)(1)(iv)].</p> <p>9. PCB Transformers are subject to certain registration requirements [40 CFR 761.30(a)(1)(vi) and (vii)].</p>	<ul style="list-style-type: none"> ● Review the inventory of PCB Transformers and determine if any PCB Transformers are located in or near commercial buildings. ● Determine if a plan exists to equip Radial PCB Transformers and lower secondary voltage network PCB Transformers (network transformers with secondary voltages below 480 volts) with electrical protection to avoid transformer failure that would result in the release of PCBs. ● Determine if all PCB Transformers, including those in storage for reuse, have been registered with the fire department and verify that the following registration information has been provided: <ul style="list-style-type: none"> - physical location of PCB Transformer(s); - principal constituent of the dielectric fluid (i.e., PCBs, mineral oil, silicone oil, etc.); - name and telephone number of contact person 		

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<p>9. Continued</p> <p>10. PCB Transformers may be serviced and may be "topped off" with dielectric fluid at any PCB concentration, but the removal of the coil from a PCB Transformer is prohibited [40 CFR 761.30 (a)(2)(ii)].</p> <p>11. Dielectric fluids used in, or removed from PCB Transformers and PCB-Contaminated Transformers, or any fluids with PCB concentrations between 50 and 500 ppm and fluids with greater than 500 ppm PCB, must be kept separate and not mixed together and must be stored in an area that meets the storage for disposal requirements of 40 CFR 761.30 (a)(2)(iii) et seq.</p> <p>12. Heat transfer and hydraulic systems can only contain PCBs in concentrations less than 50 ppm [40 CFR 761.30(d) and (e)].</p>	<p>knowledgeable of the PCB Transformer(s).</p> <ul style="list-style-type: none"> ● Interview personnel performing transformer servicing. ● Determine what servicing activities are conducted and verify that coils are not removed. ● Determine if PCB dielectric fluid is used for servicing PCB Transformers, PCB-Contaminated Transformers or any PCB Items, and identify if PCB dielectric fluids with 50-500 ppm PCB are maintained separate from dielectric fluids that contain greater than 500 ppm. ● Identify the locations where any PCB dielectric fluids greater than 50 ppm are stored. ● Determine if fluids with concentrations equal to or greater than 50 ppm are in use in any heat transfer/hydraulic system. ● Determine if any heat transfer or hydraulic systems have formerly 		

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12. Continued	<p>contained fluids with concentrations of PCBs equal to or greater than 50 ppm.</p> <ul style="list-style-type: none"> ● Determine if testing has been conducted to demonstrate that heat transfer or hydraulic systems, which formerly contained PCBs at a concentration greater than 50 ppm, now contain less than 50 ppm PCBs. ● Analytical results that are performed in an effort to demonstrate the presence of less than 50 ppm PCB must be retained for at least 5 years after confirmation. 		
13. Electromagnets, switches, and voltage regulators may contain PCBs at any concentrations subject to certain requirements [40 CFR 761.30(h)].	<ul style="list-style-type: none"> ● Determine if any Electromagnets, Switches, and Voltage Regulators are present that contain PCBs. ● Verify that no Electromagnets that contain greater than 500 ppm PCB pose an exposure risk to food or feed. ● Verify that all Electromagnets that contain greater than 500 ppm PCB are inspected at least 		

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13. Continued	<p>weekly to determine if they are leaking.</p> <ul style="list-style-type: none"> ● Verify that Electromagnets, Switches, and Voltage Regulators that contain greater than 500 ppm PCB are not serviced or rebuilt in any manner. ● Verify that Electromagnets, Switches, and Voltage Regulators that contain between 50 and 5000 ppm PCB (PCB contaminated electrical equipment) are only serviced with dielectric fluid that contains less than 500 ppm PCB. 		
14. Capacitors may contain PCBs at any concentration subject to certain requirements [40 CFR 761.30(l)].	<ul style="list-style-type: none"> ● Determine if any PCB-containing capacitors exist onsite. ● Verify that all PCB Large High and Low Voltage Capacitors that posed an exposure risk to food and feed were removed by 1 October 1988. ● Determine if electrical shop personnel are aware that all PCB Large High and Low Voltage Capacitors must only be in use in restricted-access electrical substations after 1 October 1988. 		

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<p>15. Circuit Breakers, Reclosers, and Cable may contain PCBs at any concentration for the remainder of their useful lives subject to certain conditions [40 CFR 761.30(m)].</p> <p>16. Certain equipment that contains PCBs must be marked with an M_L marking [40 CFR 761.40(a)].</p> <p>- Note: An M_S marking may be used in situations where the PCB article or PCB equipment is too small to accommodate an M_L marking.</p>	<ul style="list-style-type: none"> ● Determine if any Circuit Breakers, Reclosers, or Cable at the facility contain PCBs. ● Verify that Circuit Breakers, Reclosers, and Cable are serviced using only dielectric fluid that contains less than 50 ppm PCB. ● Inspect equipment that contains PCBs and verify that the following are marked with an M_L marking that can be easily read by any person inspecting or servicing the equipment: <ul style="list-style-type: none"> - PCB Transformers; - PCB Large High Voltage Capacitors; - equipment that contains a PCB Transformer or a PCB Large High Voltage Capacitor must be marked at the time of removal; - PCB Large Low Voltage Capacitors at the time of removal; - Electric Motors, Hydraulic Systems, Heat Transfer Sys- 		

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16. Continued	<p>tems, and PCB Containers that contain PCBs at a concentration greater than 50 ppm;</p> <ul style="list-style-type: none"> - PCB Containers; - PCB Article Containers that contain any of the above items; - vehicles used to transport PCB Containers that contain more than 45 kg (99.4 lbs) of liquid PCBs in concentrations of 50 ppm or greater or with one or more PCB Transformers shall be marked on each end or side; - protected locations such as power poles, structures, or fenced areas at which one or more PCB Large High Voltage Capacitors are installed; - each PCB storage area; and - the vault door, machinery room door, fence, hallways or means of access near the PCB Transformer so as to be easily read by firefighters fighting a fire involving such PCB Transformers. 		

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<p>17. PCB Articles and PCB Containers stored for disposal must be removed from storage and disposed of within 1 year from the date when it was first placed into storage [40 CFR 761.65(a)].</p> <p>18. PCB Articles, PCB Containers, PCB Fluids and any equipment that contain PCBs and that are to be stored prior to disposal must be stored in a facility that will ensure the containment of PCBs [40 CFR 761.65(b)].</p> <p>- NOTE: Liquid hazardous wastes containing PCBs at concentrations greater or equal to 50 ppm must be stored at a facility that meets the storage requirements in 40 CFR 761.65(b) and must be removed from storage and treated or disposed of within 1 year of the date such wastes were first placed into storage [40 CFR 268.50(f)].</p>	<ul style="list-style-type: none"> ● Verify through annual reports and interviews with site personnel that stored PCB Items and PCB Containers are not stored for longer than 1 year. ● Inspect the PCB storage area to verify that the following storage requirements are met: <ul style="list-style-type: none"> - the roof and walls are adequate to prevent rain water from reaching the stored PCBs and PCB items; - the floor has a curb that is continuous and is at a minimum 6 inches high; - the floor and curbing provide a containment volume equal to at least 2 times the internal volume of the largest PCB article or PCB container stored therein or 25% of the total internal volume of all PCB articles or containers stored therein, whichever is greater; - there are no drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit 		

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<p>18. Continued</p>	<p>liquids to flow from the curbed area;</p> <ul style="list-style-type: none"> - floors and curbing are constructed of continuous smooth and impervious materials; and - the storage site is located above the 100-year flood water elevation. <ul style="list-style-type: none"> ● Verify that liquid hazardous wastes containing PCBs at concentrations greater or equal to 50 ppm are stored for less than 1 year. ● Inspect areas used for 30-day storage and verify that only the following items are stored: <ul style="list-style-type: none"> - non-leaking PCB Articles and PCB Equipment; - leaking PCB Articles and PCB Equipment when placed in a non-leaking PCB Container that contains sufficient sorbent material to absorb the liquid contained in the PCB Article or equipment; 		
<p>19. PCB Items may also be stored in other areas that do not comply with the storage area requirements when such storage is for a period of less than 30 days and when any such PCB Items are marked with the date of removal from service [40 CFR 761.65(c)(1)].</p>			

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19. Continued	<ul style="list-style-type: none"> - PCB Containers in which non-liquid PCBs have been placed; - PCB Containers in which liquid PCBs at a concentration between 50-500 ppm have been placed if the container is marked to indicate that the liquids do not exceed 500 ppm PCB and if the storage area has been included in the Spill, Prevention, Control, and Countermeasure Plan for the facility as described in 40 CFR 112. 		
20. PCB Large High Voltage Capacitors and PCB Contaminated Electric Equipment that have not been drained of free flowing dielectric fluid may be stored on pallets next to a storage area that complies with the storage area requirements [40 CFR 761.65(c)(2)].	<ul style="list-style-type: none"> ● Verify that Capacitors and equipment stored outside the storage facility are inspected at least weekly. 		
21. The storage of PCBs and PCB items is subject to certain management requirements [40 CFR 761.65(c)(3) et seq].	<ul style="list-style-type: none"> ● Verify that the following practices are conducted at any areas where PCBs or PCB Items are stored: <ul style="list-style-type: none"> - movable equipment used for handling PCBs and PCB Items that directly contact 		

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21. Continued	<p>PCBs must not be removed from the storage area unless decontaminated as specified in 40 CFR 761.79;</p> <ul style="list-style-type: none"> - inspections for leaks must be done every 30 days of all PCB Articles and PCB Containers in storage; - any leaked PCBs immediately cleaned up and any spill absorbent material is disposed of according to 40 CFR 761.60(a)(4); - PCB Articles and Containers shall be marked with the date when placed into storage; - PCB Articles and PCB Containers shall be positioned so that they can be located by the date they were placed into storage; - containers in which PCBs are accumulated shall have a record that includes the quantity and date of each batch. 		
22. Containers used for the storage of PCBs shall comply with DOT Shipping Container Specifications [40 CFR 761.65(c)(6)].	<ul style="list-style-type: none"> ● Inspect PCB storage area for containers. 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
22. Continued	<ul style="list-style-type: none"> ● Verify that DOT Specs are on the drums/containers. Typical Specs are 5, 5B, 17C. ● Containers used for storage of liquid PCBs must be containers without removable heads. - Note: Containers larger than those specified in DOT Specs 5, 5B, or 17C may be used for non-liquid PCBs when such containers will provide as much protection against leaking and exposure to the environment as the DOT specified containers. 		
23. Spills of PCB liquids at concentrations of 50 ppm or greater shall be cleaned up in accordance with established PCB Spill Cleanup Policy (40 CFR 761.120-761.135).	<ul style="list-style-type: none"> ● Check that spills directly into surface water, drinking water, sewers, grazing lands, and vegetable gardens were immediately reported and measures taken to minimize further environmental contamination and were decontaminated in accordance with site-specific requirements. ● Review spill cleanup records to verify that all other PCB spills after 4 May 1987 have been cleaned up to the following standards: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
23. Continued	<ul style="list-style-type: none"> - surfaces cleaned to 10 %g/100 cm²; - contaminated soil and surface buffer removed and backfilled with clean soil containing less than 1 ppm PCBs. - Note: See regulation for more details involving spills of 1 pound or more PCBs by weight. 		
24. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm are prohibited from land disposal [40 CFR 268.32(a)(2) or applicable state regulations].	<ul style="list-style-type: none"> ● Verify that no liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm were sent for land disposal. 		
25. PCB liquids greater than 500 ppm must be disposed of in an incinerator that is approved by EPA to incinerate PCBs [40 CFR 761.60(a)(1) or applicable state regulations].	<ul style="list-style-type: none"> ● Check manifests for all PCB shipments over the past 3 years and verify that all shipments were made to EPA-licensed PCB incinerators. 		
26. PCB-contaminated fluids (between 50 ppm and 500 ppm) must be incinerated in a PCB incinerator, burned in a high efficiency boiler, or buried in a chemical waste landfill [40 CFR 761.60(a)(2)].	<ul style="list-style-type: none"> ● Determine if any PCB fluids meeting these criteria were processed for disposal in the last year. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>26. Continued</p> <p>27. Rags, soils, and other debris contaminated with PCBs must be disposed of in a PCB incinerator or in a chemical waste and fill [40 CFR 761.60(a)(4)].</p> <p>28. PCB Transformer carcasses can be landfilled in a chemical waste landfill if it is drained of PCB fluids, filled with solvent and allowed to stand for 18 hours. PCB fluids and solvent must be incinerated [40 CFR 761.60(b)(1)].</p> <p>29. PCB Capacitors must be disposed of in accordance with certain facility regulations [40 CFR 761.60(b)(2)].</p>	<ul style="list-style-type: none"> ● Determine if such PCB fluids were disposed of by an approved method at a properly approved facility. ● Determine if any contaminated soil or debris has been disposed of and that disposal was conducted at a properly approved facility. ● Verify that contractors and personnel involved with the disposal of PCB Transformers drain, rinse, and dispose of the transformer carcasses in accordance with these regulations. ● Determine disposal procedures for Capacitors: <ul style="list-style-type: none"> - PCB Small Capacitors (3 lbs of PCBs) can be disposed of in a solid waste landfill; - PCB Large High or Low Voltage Capacitors (3 lbs of PCBs) containing more than 500 ppm must be incinerated or disposed of in a chemical waste landfill. 		

AIR EMISSIONS

I. Applicable Regulations and Orders

This assessment area applies to any FUSRAP site that emits pollutants into the air. This assessment area is based on requirements promulgated under the Clean Air Act (CAA) and focuses on the Federal regulations contained in the following Federal regulations:

- 40 CFR 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans
- 40 CFR 60 Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971
- 40 CFR 61 National Emission Standards for Hazardous Air Pollutants.

The assessment also focuses on the following DOE Orders:

- Order 5400.1 General Environmental Protection Program
- Order 5480.4 Environmental Protection, Safety, and Health Protection Standards (Note: this Order is not referenced explicitly in the checklist; it identifies CAA as a mandatory Environmental Protection, Safety, and Health Protection standard)
- Order 5484.1 Environmental Protection, Safety, and Health Protection Information Reporting Requirements

II. Key Definitions

The following terms are used in the Air Emissions Checklist and are important in determining the compliance status of the site. The definitions provided below are those presented in 40 CFR §§ 51.1, 60.41, 61.02, 61.91, and 61.141 (Definitions).

Adequately Wetted: Sufficiently mixed or coated with water or an aqueous solution to prevent dust emissions.

Asbestos: The asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

Critical organ: The most exposed human organ or tissue exclusive of the integumentary system (skin) and the cornea.

Demolition: The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations.

Dose Equivalent: the product of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its distribution in the body. The unit of the dose equivalent is the rem.

Existing Source: Any stationary source which is not a new source.

Fossil Fuel: Natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

Friable asbestos: Any material containing more than 1% asbestos by weight that hand pressure can crumble, pulverize, or reduce to powder when dry.

New Source: Any stationary source, the construction or modification of which is commenced after the publication in the *Federal Register* of proposed national emission standards for hazardous air pollutants which will be applicable to such source.

Outside air: The air outside buildings and structures.

Radionuclide: Any nuclide that emits radiation. A nuclide is a species of atom characterized by the constitution of its nucleus and hence by the number of protons, the number of neutrons, and the energy content.

Renovation: Altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.

Startup: The setting in operation of a stationary source for any purpose.

Stationary Source: Any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the EPA Administrator.

Visible emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

Whole Body: All human organs or tissue exclusive of the integumentary system (skin) and the cornea.

III. Assessment Procedures

The auditor will need copies of or access to the following documents in order to assess the compliance of the site with the regulations applicable to air emissions:

- An emissions inventory that lists all sources of air pollution and estimates of the total

emissions by pollutant;

- All permits and certificates of operation;
- Emissions monitoring, testing, or sampling reports for the past three years;
- Building demolition records regarding asbestos management including the written notice to EPA;
- Radionuclide emissions monitoring results and dose equivalent calculations;
- Annual Radionuclide Emissions Report; and
- Records of communication with EPA or the state regarding uncertainty about compliance or any alleged violations

Given the varied characteristics of FUSRAP sites, not all the air emissions requirements listed in the checklist will apply to all sites. To assist the auditor in finding those requirements that are applicable, the following table should be consulted:

<u>If the site:</u>	<u>See Checklist Items</u>
1. has existing or potential air emission source,	1-2
2. has fuel burners constructed after August 17, 1971,	3-8
3. has buildings that contain friable asbestos,	9-13
4. can emit radionuclides,	14-18

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. Facilities are required to conduct an emissions inventory that lists all sources of air pollution and estimates the total emissions of each pollutant (40 CFR 51.322).</p> <p>2. A certificate of operation is required to operate an existing air contamination source, and a permit is required to commence construction of a new air contamination source or modify an existing one (applicable state regulation).</p>	<ul style="list-style-type: none"> ● Verify that an emissions inventory has been conducted and is periodically updated. ● Determine if the EPA document AP-42 or the Method Manual for Calculating Air Pollution Emission Inventories (Handout EH 114) is used to estimate the amount of air pollutants from specific sources (Good Management Practice). ● Verify that each air contamination source has a certificate or permit and identify those sources that are exempt from permits under state regulations, such as: <ul style="list-style-type: none"> - unit space heaters; - combustion installations where the maximum operating heat input is less than one million BTU per hour; and - fuel burning equipment using as fuel No. 2 oil, diesel oil, natural gas, L.P. gas, or a mixed gas distributed by a utility in accordance to applicable regulations. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>2. Continued</p> <p>3. All fuel burners constructed after 17 August 1971 with an input capacity of over 250 MBTU/hr are subject to EPA's New Source Performance Standards (NSPS) (40 CFR 60.42).</p> <p>4. State regulations often require existing fuel burning sources to meet specified opacity limits (applicable state regulations).</p> <p>5. Fuel burning facilities subject to NSPS are required to limit particulate emissions to 0.05 pounds/MBTU (40 CFR 60.42).</p>	<ul style="list-style-type: none"> ● Examine permits and certificates for effective dates and special conditions or requirements. ● Compare permitted sources with those listed on the emissions inventory. ● Determine which fuel burning facilities must meet the NSPS requirements. ● Check the appendix for the appropriate state requirements. ● Inspect the facility and observe the opacity during normal operation. Using a Ringelman chart, verify that the opacity is less than 20%. ● If possible, observe the facility during startup, maintenance, soot blowing, or shutdown to verify that the opacity limit of 40% for less than 5 minutes/hr is met. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>6. Fuel burning facilities subject to NSPS must have continuous monitoring for nitrogen oxides emissions discharged to the atmosphere (40 CFR 60.47 and DOE Orders 5400.1 and 5484.1).</p> <p>7. Fuel burning sources subject to NSPS must not discharge more than 0.8 pounds sulfur dioxide per MBTU heat input (40 CFR 60.43).</p> <p>8. Fuel burners over 250 MBTU/hr are required to have combustion efficiency (CO₂) and emission (opacity) monitoring equipment installed on the boiler. SO₂ and NO_x detectors are also required by NSPS (40 CFR 60.45).</p> <p>9. Demolition of buildings that contain friable asbestos must meet certain requirements (40 CFR 61.145 or applicable state regulations).</p>	<ul style="list-style-type: none"> ● Insure that fuel burning sources subject to NSPS requirements conduct continuous monitoring for nitrogen oxides and opacity. ● Examine available records for fuel used in boilers and determine if the sulfur content is within applicable limits. ● Inspect applicable sources for the proper monitoring equipment, to include: <ul style="list-style-type: none"> - CO₂ or O₂ monitor; - Opacity monitor; - NO_x detector; - SO₂ detector (not required if monitored by fuel sampling). ● Determine if any building contains at least 80 linear meters (260 linear feet) of friable asbestos on pipe or at least 15 square meters (160 square feet) on other facility components. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>9. Continued</p> <p>10. The owner or operator of a demolition or renovation operation must provide the EPA Administrator with written notice of his intention to demolish or renovate (40 CFR 61.146 or applicable state regulations).</p>	<ul style="list-style-type: none"> ● Determine if any building is being demolished under order of a State or local government. ● Verify that EPA is notified of the intent to demolish: <ul style="list-style-type: none"> - at least 10 days before demolition begins if the building contains at least 80 linear meters of friable asbestos on pipe or at least 15 square meters on other facility components; - at least 20 days before demolition begins if the building contains less than 80 linear meters of friable asbestos on pipe or at least 15 square meters on other facility components; - as early as possible before demolition begins if the structure is being demolished under an order of a State or local government; or - as early as possible before renovation begins. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
10. Continued	<ul style="list-style-type: none"> ● Examine the written notice and verify that it contains the following information: <ul style="list-style-type: none"> - name and address of owner or operator; - description of the building being renovated or demolished (size, age, prior use); - estimates of the approximate amount (linear ft. or surface area) of friable asbestos present in the structure; - location of the facility being demolished or renovated; - scheduled start and completion dates of renovation or demolition; and - if applicable, the name, title, and authority of the State or local authority ordering the demolition. ● If the building contains at least 80 linear meters of friable asbestos on pipe or at least 15 square meters on other facility components, then verify that the writ- 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>10. Continued</p>	<p>ten notice also contains the following:</p> <ul style="list-style-type: none"> - nature of the planned demolition or renovation methods to be used; - procedures for asbestos emissions control; and - name and location of the waste disposal site where asbestos will be disposed. 		
<p>11. Asbestos emissions must be controlled per 40 CFR 61.147(d) through (g) if the facility is being demolished under order of a State or local government [40 CFR Part 61.145(c) or applicable state regulations].</p> <ul style="list-style-type: none"> - Note: OSHA regulations designed to protect workers handling asbestos (29 CFR 1910) are not in this checklist. 	<ul style="list-style-type: none"> ● Verify that facility components taken out as units or in sections either have the friable asbestos adequately wet during stripping or that a local exhaust ventilation and collection system is used that is designed and operated to capture the particulate asbestos material and exhibits no visible emissions to the outside air. ● Verify that friable asbestos materials that are being removed or stripped are: <ul style="list-style-type: none"> - adequately wet to ensure that they remain wet until they are collected for disposal; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>11. Continued</p>	<ul style="list-style-type: none"> - carefully lowered to the ground or lower floor and not dropped; and - transported to the ground via dust-tight chutes or containers if they are removed or stripped more than 50 feet above ground level and are not removed as units or in sections. ● Verify that portions of the facility that contain asbestos are adequately wet during wrecking operation. ● If the temperature at the point of wetting is below 0 °C (32 °F), verify that asbestos materials are removed in sections or units to the maximum extent possible. 		
<p>12. If the facility contains at least 80 linear meters of friable asbestos on pipe or at least 15 square meters on other facility components, additional emission control procedures are required [40 CFR 61.145(a) or applicable state regulations].</p>	<ul style="list-style-type: none"> ● If the temperature at the point of wetting is above 0 °C (32 °F), verify that the friable asbestos materials are removed prior to wrecking or dismantling unless the asbestos is encased in concrete or similar material and is adequately wetted when exposed. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
12. Continued	<ul style="list-style-type: none"> ● Verify that when facility components (e.g., pipes, boilers, etc.) covered or coated with asbestos are removed as units or in sections, the friable asbestos materials are adequately wet when exposed during cutting or jointing operations and are lowered carefully (not dropped or thrown) to ground level. ● Verify that friable asbestos materials that are stripped from facility components before the components are removed are adequately wetted, unless <ul style="list-style-type: none"> - the operator has requested and received determination from the EPA that wetting would unavoidably damage equipment; and - a local exhaust ventilation and collection system designed and operated to capture asbestos emissions is used. - the exhaust system exhibits no visible emissions to outside air. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
12. Continued	<ul style="list-style-type: none"> ● Verify that the asbestos-containing waste materials are sent to a waste disposal site approved for asbestos waste disposal. 		
13. Each owner or operator of a demolition or renovation operation must meet certain asbestos disposal requirements (40 CFR 61.152 or applicable state regulations).	<ul style="list-style-type: none"> ● Verify that there are no visible emissions to outside air during the collection, processing, packaging, transporting, or deposition of any asbestos-containing waste material. 		
14. Radionuclide emissions from DOE facilities must be monitored and dose equivalents to members of the public must be calculated using EPA approved sampling procedures, EPA models AIRDOS-EPA and RADRISK, or other procedures that EPA has determined to be suitable (40 CFR 61.93 and DOE Orders 5400.1 and 5484.1).	<ul style="list-style-type: none"> ● Verify that radionuclide emissions are monitored. ● Verify that dose equivalents to members of the public are calculated using EPA approved sampling procedures, EPA models AIRDOS-EPA and RADRISK, or other procedures that EPA has determined to be suitable. ● Verify that the dose equivalent is calculated at the point of maximum annual air concentration in an unrestricted area where any member of the public resides or abides (e.g., at a residence, school, business, or office). 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>15. Emissions of radionuclides (excluding radon-220, radon-222, and their respective decay products) from DOE facilities must not exceed those amounts that cause a dose equivalent of 25 mrem/year to the whole body or 75 mrem/year to the critical organ of any member of the public (40 CFR 61.92).</p> <p>16. After February 5, 1985, no owner or operator shall construct a new stationary source or modify an existing source subject to the radionuclide NESHAPs without first obtaining written approval from the EPA Administrator (40 CFR 61.05).</p> <p>17. The owner or operator of any existing or new source that had an initial startup that preceded February 5, 1985 must have notified the EPA Administrator in writing by May 5, 1985, of such startup [40 CFR 61.94(b)].</p>	<ul style="list-style-type: none"> ● Examine the results of the emissions monitoring and the associated dose calculations. Verify that the dose equivalent is less than or equal to 25 mrem/year to the whole body or 75 mrem/year to the critical organ of any member of the public. ● Determine if the facility has modified an existing stationary source of radionuclide emissions or has constructed a new source after February 5, 1985. Verify that each modification or construction has received from the EPA Administrator written approval for such construction or modification. ● Determine if any sources had a startup date preceding February 5, 1985. Verify that notification was sent and contained the following information: <ul style="list-style-type: none"> - name and address of the owner or operator; - the location of the source; - the types of radionuclides emitted by the stationary 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
17. Continued	<p>source and the annual quantity (in Ci/year for the most recent calendar year) of each radionuclide emitted;</p> <ul style="list-style-type: none"> - a brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of such source; - a description of the existing control equipment for each emission point; and - a statement by the owner of whether he can comply with the standards prescribed within 90 days of February 5, 1985. 		

WATER EMISSIONS

I. Applicable Regulations and Orders

This assessment area applies to any FUSRAP site that emits pollutants into the surface water or groundwater. This assessment area is based on requirements promulgated under the Clean Water Act (CWA) and focuses on the Federal regulations contained in the following Federal regulations:

40 CFR 122 EPA Administered Permit Programs: The National Pollutant Discharge Elimination System

40 CFR 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants

The assessment also focuses on the following DOE Orders:

Order 5400.1 General Environmental Protection Program

Order 5480.4 Environmental Protection, Safety, and Health Protection Standards (Note: this Order is not referenced explicitly in the checklist; it identifies CWA as a mandatory Environmental Protection, Safety, and Health Protection standard)

Order 5484.1 Environmental Protection, Safety, and Health Protection Information Reporting Requirements

II. Key Definitions

The following terms are used in the Water Discharges Checklist and are important in determining the compliance status of the site. The definitions provided below are those presented in 40 CFR § 122.2 (Definitions).

Discharge of a pollutant: (1) any addition of any pollutant or combination of pollutants to water of the United States from any point source, or (2) any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

Point Source: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged.

Pollutant: Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage

sludge, munitions, chemical wasters, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954 as amended[source, byproduct, or special nuclear materials]), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Publicly owned treatment work: Any device or system used in the treatment of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality.

Waters of the United States: (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters, including interstate wetlands, and (3) all other waters the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce.

III. Assessment Procedures

The auditor will have copies of or access to the following documents in order to assess the compliance of the site with the regulations applicable to water discharges:

- A list of discharge points to navigable waters or publicly owned treatment works;
- Copies of NPDES/SPDES permits (current and recently expired);
- Discharge monitoring, testing, or sampling reports for the past three years; and
- Records of communication with EPA or the state regarding uncertainty about compliance or any alleged violations.

Given the varied characteristics of FUSRAP sites, not all the water discharge requirements listed in the checklist will apply to all sites. To assist the auditor in finding those requirements that are applicable, the following table should be consulted:

<u>If the site:</u>	<u>See Checklist Items</u>
1. has an NPDES/SPDES permit,	1-6, 10
2. has any discharge points	7, 10
3. discharges to a POTW,	8

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. The NPDES program requires permits for the discharge of pollutants from any point source into waters of the United States (40 CFR 122, Subpart A, and applicable state regulations).</p>	<ul style="list-style-type: none"> ● Determine where the sanitary, industrial, and stormwater runoffs are discharged. Identify these discharge points on a map, if possible. ● Examine all NPDES discharge permits, if applicable. Verify that all the information contained in the permit is still valid. Check the following items: <ul style="list-style-type: none"> - if the name and mailing address of permittee is correct; - expiration dates; - if the discharge is as described in the permit; - if the treatment processes are as described in the permit; - if the location of discharge points are properly described in the permit; and - if the name and location of the receiving water are correct. ● Verify that notification was given to EPA of new, different, or in- 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. Continued</p> <p>2. NPDES permits normally require the facility to monitor discharges for all permitted parameters [40 CFR 122.41(j) or appropriate state regulations, and DOE Orders 5400.1 and 5484.1].</p>	<p>creased discharges since the last permit application was submitted.</p> <ul style="list-style-type: none"> ● Determine if stormwater runoff is analyzed for contamination. ● Verify that any monitoring being performed is done in accordance with the conditions specified in the permit. Check that: <ul style="list-style-type: none"> - the locations of the sampling points result in representative samples; - parameters and sampling frequency are consistent with the permit; and - samples are collected according to the method specified in the permit. ● Verify that flow measurements fulfill the requirements of the permit. Check that: <ul style="list-style-type: none"> - the primary measuring device is properly installed, operated, and maintained; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
2. Continued	<ul style="list-style-type: none"> - calibration records are kept for the primary measuring device; and - any secondary instruments (e.g., recorders) are properly operated and maintained. 		
3. Samples must be collected in accordance with proper collection procedures in "Standard Methods for Water/Wastewater Analysis," 40 CFR 136.3 [40 CFR 122.41(j)(4)].	<ul style="list-style-type: none"> ● Review the two most recent discharge monitoring reports and compare the findings with limits specified in the permit. Note any discrepancies. ● Verify from interviews with site personnel that: <ul style="list-style-type: none"> - proper sample containers are used; - samples are refrigerated during compositing; - proper preservation techniques are used; - flow-proportioned samples are obtained if required by the permit; and - sample holding times prior to analyses are in accordance with requirements. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>3. Continued</p> <p>4. Analytical testing must be conducted in accordance with EPA-approved analytical procedures (40 CFR 136.3).</p> <p>5. NPDES permits may require reporting and the maintenance of various records (40 CFR 122.41(j)(3) or applicable state regulations).</p>	<ul style="list-style-type: none"> ● Determine if monitoring and analyses are being performed more frequently than required by the permit and verify that the results are reported in the facilities discharge monitoring reports. ● Determine if: <ul style="list-style-type: none"> - an EPA-approved analytical testing laboratory is used and, if a commercial lab is used, whether it is state certified; - alternate analytical procedures are used and, if so, that proper approval has been obtained from the EPA or state; - parameters other than those required by the permit are analyzed; and - quality control procedures are used. ● Verify that the discharge monitoring records include the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
5. Continued	<ul style="list-style-type: none"> - the date, exact location, and time of sampling or measurement; - the individual(s) who performed the sampling or measurement; - the date(s) analyses were performed; - the analytical techniques or methods used; and - the results of such analyses. 		
6. NPDES permits often contain compliance schedules [40 CFR 122.41(l)(5) or applicable state regulations].	<ul style="list-style-type: none"> ● Verify that lab equipment calibration and maintenance records and quality assurance records are kept, if required in the permit. ● Determine if records are maintained of those industrial processes that are major contributors to the effluent discharges. ● Check the permit for a compliance schedule and determine whether compliance dates are being met. ● Determine if the facility has informed the appropriate 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>6. Continued</p> <p>7. Auditors should physically observe each discharge point (Good Management Practice).</p> <p>8. Sites which discharge industrial wastewater to a publicly-owned treatment works must meet certain requirements (40 CFR 403.5 or applicable state regulations).</p>	<p>regulatory authority in writing of its compliance or non-compliance with any compliance dates or requests for extensions.</p> <ul style="list-style-type: none"> ● Inspect each discharge point at the site and note the appearance, odor, or other observed characteristics (oil sheen, visible grease, turbidity, visible foam, color, visible floating solids). ● Determine if the site discharges to a POTW. ● Verify that the facility does not discharge into a POTW such that the discharge: <ul style="list-style-type: none"> - is a cause of a violation of any requirements of the POTW's NPDES permit (e.g., pass through); - inhibits or disrupts the POTW, its treatment process, or its sludge processes, use or disposal (e.g., interference); - creates a fire or explosion hazard in the POTW; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
8. Continued	<ul style="list-style-type: none"> - causes corrosive structural damage to the POTW (e.g., from discharges of pH lower than 5); or - heat in amounts that would inhibit the biological activity in the POTW. <ul style="list-style-type: none"> ● Determine what discharge limitations apply to the sites in industrial discharges. ● Determine if the site has notified the POTW in advance of introducing any new pollutants or changing the volume or characteristics of their effluent. ● Determine if any analytical results are being reported to the POTW, if required. 		
9. Industrial hazardous wastewaters must be treated and disposed of in accordance with certain requirements [40 CFR 264.18(c) or applicable state regulations].	<ul style="list-style-type: none"> ● Determine if an industrial wastewater survey has been conducted to determine source, composition, and pattern of discharge. 		
10. DOE sites are required to monitor effluents to surface waters to determine compliance with all DOE,	<ul style="list-style-type: none"> ● Verify that discharges to surface waters are monitored or that the appropriate DOE field organiza- 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>EPA, state agency, etc. imposed effluent limits and other environmental commitments; to identify potential problems; and to detect, characterize, and report unplanned releases (DOE Orders 5400.1 and 5484.1).</p>	<p>tion has determined that there is no need for such monitoring pursuant to DOE Order 5400.1.</p> <ul style="list-style-type: none"> ● Verify that measurements of volume, rate of discharge, content, etc., are made, insofar as is practical, at the point at which the data most closely represent what is being released. ● Verify that sampling type and frequency (e.g., grab samples, continuous monitoring, etc.) are consistent with the purpose for which the data are being obtained. 		

APPENDIX A

CALIFORNIA CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. California has its own list of hazardous wastes and definitions for determining characteristic hazardous wastes (22 California Administrative Code (CAC) Articles 9 and 11).</p> <p>16. California requires the use of the state version of the federal Uniform Hazardous Waste Manifest and imposes additional filing requirements (22 CAC 66481).</p> <p>25. Every hazardous waste transporter who hauls hazardous waste in or through California must be registered with the DOHS (22 CAC 66428).</p> <p>28a. TSD facilities that handle or dispose of extremely hazardous wastes in California must have an Extremely Hazardous Waste Disposal Permit (22 CAC 66570).</p>	<ul style="list-style-type: none"> ● See the appended list of hazardous wastes and the definitions for characteristic hazardous wastes. Determine if the facility generates or manages any of the substances. ● Verify that the facility uses the California manifest. ● Verify that the facility sends a copy of each manifest to the California Department of Health Services (DOHS) within 30 days of the shipment of the hazardous waste. ● Verify that the facility uses only those hazardous waste transporters who are registered with the State. ● Verify that the facility has the required permit if extremely hazardous wastes are accepted. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>28b. TSD facilities must inform each contributing generator in writing that the facility has all appropriate permits and will accept the generator's waste [22 CAC 67010(b)].</p> <p>35. All surface impoundments, waste piles, landfills, land treatment facilities, and covers and other containment and control features must be designed and constructed to withstand a maximum credible earthquake [22 CAC 67108(b)].</p> <p>41a. Owners and operators of TSD facilities must prepare and submit a single copy of an annual report to DOHS by March 1 for the previous calendar year (22 CAC 6715).</p>	<ul style="list-style-type: none"> ● Through interviews, ensure that the TSD facility sends a written notice to each generator. ● Obtain a copy of the written notice and verify that the facility has all the permits indicated on the notice. ● Determine if the facility has been so designed. As a good management practice, an engineering certification of the design should be obtained and retained. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - calendar year covered by the report; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41a. Continued	<ul style="list-style-type: none"> - identification number for all generators from which waste was received during the year; - description and quantity of hazardous waste received; - method of treatment or disposal; and - certification signed by the owner/operator of the facility. <ul style="list-style-type: none"> ● If the facility accepts unmanifested waste, verify that a unmanifested waste report containing the following information is sent to DOHS within 15 days of receiving such waste: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - date the unmanifested waste was received; - identification number, name, and address of generator and transporter, if available; - description and quantity of hazardous waste received; 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>41a. Continued</p>	<ul style="list-style-type: none"> - method of treatment or disposal; - certification signed by the owner/operator of the facility; and - a brief explanation of why the waste was unmanifested. 		
<p>41b. TSD facilities that only receive wastes from onsite must submit to DOHS monthly reports by the 15th day of each month (22 CAC 67169).</p>	<ul style="list-style-type: none"> ● If the facility only receives such waste, verify that monthly reports are sent. 		
<p>41c. TSD facilities that receive wastes from offsite sources must submit a legible copy of all manifests within 30 days of each receipt of shipment (22 CAC 67169).</p>	<ul style="list-style-type: none"> ● If the facility receives offsite wastes, verify that manifests are sent to DOHS within 15 days of receipt. 		
<p>PCB MANAGEMENT</p>			
<p>24. California prohibits the land disposal of liquid hazardous wastes containing PCBs at concentration greater than 50 ppm (22 CAC 66900).</p>	<ul style="list-style-type: none"> ● Verify that these waste are not sent to a land disposal facility. 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>AIR EMISSIONS</p> <p>1. The legislature of California has granted local and regional air districts the authority for the control of air pollution for all sources. The local districts have adopted and enforce their regulations aimed at achieving state and federal ambient air quality standards. Refer to the air pollution regulations for your district.</p> <p>WATER DISCHARGES</p> <p>1. Water discharge regulations for the State of California are issued and administered in accordance with the currently applicable federal regulations for the NPDES program (23 CAC 2235.2).</p>	<p>● Check the federal checklist for instructions.</p>		

(d) List of Chemical Names:

1. Acetaldehyde (T,F)
2. Acetic acid (T,C,F)
3. Acetone, Propanone (F)
4. *Acetone cyanohydrin (T)
5. Acetonitrile (T,F)
6. *2-Acetylaminofluorene, 2-AAF (T)
7. Acetyl benzoyl peroxide (T,F,R)
8. *Acetyl chloride (T,C,R)
9. Acetyl peroxide (T,F,R)
10. Acridine (T)
11. *Acrolein, Aqualin (T,F)
12. *Acrylonitrile (T,F)
13. *Adiponitrile (T)
14. *Aldrin: 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo-exodimethanonaphthalene (T)
15. *Alkyl aluminum chloride (C,F,R)
16. *Alkyl aluminum compounds (C,F,R)
17. Allyl alcohol, 2-Propen-1-ol (T,F)
18. Allyl bromide, 3-Bromopropene (T,F)
19. Allyl chloride, 3-Chloropropene (T,F)
20. Allyl chlorocarbonate, Allyl chloroformate (T,F)
21. *Allyl trichlorosilane (T,C,F,R)
22. Aluminum (powder) (F)
- 23A. Aluminum chloride (T,C)
- 23B. *Aluminum chloride (anhydrous) (T,C,R)
24. Aluminum fluoride (T,C)
25. Aluminum nitrate (T,F)
26. *Aluminum phosphide, PHOSTOXIN (T,F,R)
27. *4-Aminodiphenyl, 4-ADP (T)
28. *2-Aminopyridine (T)
29. *Ammonium arsenate (T)
30. *Ammonium bifluoride (T,C)
31. Ammonium chromate (T,F)
32. Ammonium dichromate, Ammonium bichromate (T,C,F)
33. Ammonium fluoride (T,C)
34. Ammonium hydroxide (T,C)
35. Ammonium molybdate (T)
36. Ammonium nitrate (F,R)
37. Ammonium perchlorate (F,R)
38. Ammonium permanganate (T,F,R)
39. Ammonium persulfate (F,R)
40. Ammonium picrate (T,R)
41. Ammonium sulfide (T,C,F,R)
42. n-Amyl acetate, 1-Acetoxypentane (and isomers) (T,F)
43. n-Amylamine, 1-Aminopentane (and isomers) (T,F)
44. n-Amyl chloride, 1-Chloropentane (and isomers) (T,F)
45. n-Amylene, 1-Pentene (and isomers) (T,F)
46. n-Amyl mercaptan, 1-Pentanethiol (and isomers) (T,F)
47. n-Amyl nitrite, n-Pentyl nitrite (and isomers) (T,F)
48. *Amyl trichlorosilane (and isomers) (T,C,R)
49. Aniline, Aminobenzene (T)
50. Anisoyl chloride (T,C)
51. Anthracene (T)
52. Antimony (T)
53. Antimony compounds (T)
54. *Antimony pentachloride (T,C,R)
55. *Antimony pentafluoride (T,C,R)
56. Antimony pentasulfide (T,F)
57. Antimony potassium tartrate (T)
58. Antimony sulfate, Antimony trisulfate (T,F)
59. Antimony trichloride, Antimony chloride (T,C)
60. Antimony trifluoride, Antimony fluoride (T,C)
61. Antimony trioxide, Antimony oxide (T)
62. Antimony trisulfide, Antimony sulfide (T,F,R)
63. *Arsenic (T)
64. *Arsenic acid and salts (T)
65. *Arsenic compounds (T)
66. *Arsenic pentaselenide (T)
67. *Arsenic pentoxide, Arsenic oxide (T)
68. *Arsenic sulfide, Arsenic disulfide (T)
69. *Arsenic tribromide, Arsenic bromide (T)
70. *Arsenic trichloride, Arsenic chloride (T)
71. *Arsenic triiodide, Arsenic iodide (T)
72. *Arsenic trioxide, Arsenious oxide (T)
73. *Arsenious acid and salts (T)
74. *Arnes (T)
75. Asbestos (including chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite) (T)
76. *AZODREN, 3-Hydroxy-N-m-crotonamide (T)
77. Barium (T,F)
78. Barium azide (T,R)
79. Barium bromide (T)
80. Barium carbonate (T)
81. Barium chlorate (T,C,F,R)
82. Barium chloride (T)
83. Barium chromate (T)
84. Barium citrate (T)
85. Barium compounds (soluble) (T)
86. *Barium cyanide (T)
87. Barium fluoride (T)
88. Barium fluosilicate (T)
89. Barium hydronide (T)
90. Barium iodide (T)
91. Barium manganate (T)
92. Barium nitrate (T,F)
93. Barium oxide, Barium monoxide (T)
94. Barium perchlorate (T,F,R)
95. Barium permanganate (T,F,R)
96. Barium peroxide (T,F,R)
97. Barium phosphate (T)
98. Barium stearate (T)
99. Barium sulfide (T)
100. Barium sulfite (T)
101. Benzene (T,F)
102. *Benzene hexachloride, BHC, 1,2,3,4,5,6-Hexachlorocyclohexane (T)
103. *Benzene phosphorous dichloride (T,R)
104. Benzenesulfonic acid (T)
105. *Benzidine and salts (T)
106. *Benzotrifluoride, Trifluoromethylbenzene (T,F)
107. *Benzoyl chloride (T,C,R)
108. Benzoyl peroxide, Dibenzoyl peroxide (T,F,R)
109. Benzyl bromide, alpha-Bromotoluene (T,C)
110. Benzyl chloride, alpha-Chlorotoluene (T)
111. *Benzyl chlorocarbonate, Benzyl chloroformate (T,C,R)
112. *Beryllium (T,F)
113. *Beryllium chloride (T)
114. *Beryllium compounds (T)
115. *Beryllium copper (T)
116. *Beryllium fluoride (T)
117. *Beryllium hydride (T,C,F,R)
118. *Beryllium hydroxide (T)
119. *Beryllium oxide (T)
120. *BIDREN, Dicrotophos, 3-(Dimethylamino)-1-methyl-3-oxo-1-propenyl dimethyl phosphate (T)
121. *bis (Chloromethyl) ether, Dichloromethylether, BCME (T)
122. Bismuth (T,F)
123. *bis (Methylmercuric) sulfate, CEREWET, Cerecan liquid (T)
124. Bismuth chromate (T)
125. *BOMYL, Dimethyl 3-hydroxyglutaconate dimethyl phosphate (T)
126. *Boranes (T,F,R)
127. *Bordeaux arsenites (T)
128. *Boron trichloride, Trichloroborane (T,C,R)
129. *Boron trifluoride (T,C,R)
130. Bromic acid (T)
131. *Bromine (T,C,F)
132. *Bromine pentafluoride (T,C,F,R)
133. *Bromine trifluoride (T,C,F,R)
134. *Brucine, Dimethoxystrychnine (T)
135. 1,2,4-Butanetriol trinitrate (T)
136. n-Butyl acetate, 1-Acetorybutane (and isomers) (T)
137. n-Butyl alcohol, 1-Butanol (and isomers) (T)
138. n-Butyl amine, 1-Aminobutane (and isomers) (T)
139. n-Butyl formate (and isomers) (T)
140. tert-Butyl hydroperoxide (and isomers) (T,F)
141. n-Butyllithium (and isomers) (T,C,F,R)
142. n-Butyl mercaptan, 1-Butanethiol (and isomers) (T,F)
143. tert-Butyl peroxyacetate, tert-Butyl peracetate (F,R)
144. tert-Butyl peroxybenzoate, tert-Butyl perbenzoate (F,R)
145. tert-Butyl peroxyvalerate (F,R)
146. *n-Butyltrichlorosilane (C,F,R)
147. para-tert-Butyl toluene (T)
148. n-Butyraldehyde, n-Butanal (and isomers) (T,F)
149. *Cacodylic acid, Dimethylarsinic acid (T)

150. *Cadmium (powder) (T,F)
151. Cadmium chloride (T)
152. *Cadmium compounds (T)
153. *Cadmium cyanide (T)
154. Cadmium fluoride (T)
155. Cadmium nitrate (T,F,R)
156. Cadmium oxide (T)
157. Cadmium phosphate (T)
158. Cadmium sulfate (T)
159. *Cadmium (F,R)
160. *Calcium arsenate, PENSAL (T)
161. *Calcium arsenite (T)
162. *Calcium carbide (C,F,R)
163. Calcium chlorate (F,R)
164. Calcium chlorite (F)
165. Calcium fluoride (T)
166. *Calcium hydride (C,F,R)
167. Calcium hydronide, Hydrated lime (C)
168. *Calcium hypochlorite, Calcium oxychloride (dry) (T,C,F,R)
169. Calcium molybdate (T)
170. Calcium nitrate, Lime nitrate, Nitrocalcite (F,R)
171. Calcium oxide, Lime (C)
172. Calcium permanganate (T,F)
173. Calcium peroxide, Calcium dioxide (C,F)
174. *Calcium phosphide (T,F,R)
175. Calcium resinate (F)
176. Caprylyl peroxide, Octyl peroxide (F)
177. *Carbanolate, BANOL, 2-Chloro-4,5-dimethylphenyl methycarbamate (T)
178. Carbon disulfide, Carbon bisulfide (T,F)
179. Carbon tetrachloride, Tetrachloromethane (T)
180. *Carbophenothion, TRITHION, S[(4-Chlorophenyl) thio]methyl O, O-diethyl phosphorodithioate (T)
181. Chloral hydrate, Trichloroacetaldehyde (hydrated) (T)
182. *Chlordane: 1,2,4,5,6,7,8,8-Octachloro-4,7-methano-3a,4,7,7a-tetrahydroindane (T)
183. *Chlorfenvinphos, Compound 4072, 2-Chloro-1-(2,4-dichlorophenyl) vinyl diethyl phosphate (T)
184. *Chlorine (T,C,F,R)
185. *Chlorine dioxide (T,C,F,R)
186. *Chlorine pentafluoride (T,C,F,R)
187. *Chlorine trifluoride (T,C,F,R)
188. *Chloroacetaldehyde (T,C)
189. *alpha-Chloroacetophenone, Phenyl chloromethyl ketone (T)
190. *Chloroacetyl chloride (T,C,R)
191. Chlorobenzene (T,F)
192. para-Chlorobenzoyl peroxide (F,R)
193. *ortho-Chlorobenzylidene malonitrile, OCMB (T)
194. Chloroform, Trichloromethane (T)
195. *Chloropicrin, Chlorpicrin, Trichloronitromethane (T)
196. *Chlorosulfonic acid (T,C,F,R)
197. Chloro-ortho-toluidine, 2-Amino-4-chlorotoluene (T)
198. Chromic acid, Chromium trioxide, Chromic anhydride (T,C,F)
199. Chromic chloride, Chromium trichloride (T)
200. Chromic fluoride, Chromium trifluoride (T)
201. Chromic hydronide, Chromium hydronide (T)
202. Chromic oxide, Chromium oxide (T)
203. Chromic sulfate, Chromium sulfate (T)
204. Chromium compounds (T,C,F)
205. *Chromyl chloride, Chlorochromic anhydride (T,C,F,R)
206. Cobalt (powder) (T,F)
207. Cobalt compounds (T)
208. Cobaltous bromide, Cobalt bromide (T)
209. Cobaltous chloride, Cobalt chloride (T)
210. Cobaltous nitrate, Cobalt nitrate (T,F)
211. Cobaltous resinate, Cobalt resinate (T,F)
212. Cobaltous sulfate, Cobalt sulfate (T)
213. Cocculus, Fishberry, Picrotoxin (T)
214. *Copper acetoarsenite, Paris green (T)
215. Copper acetylides (T,R)
216. *Copper arsenate, Cupric arsenate (T)
217. *Copper arsenite, Cupric arsenite (T)
218. Copper chloride, Cupric chloride (T)
219. Copper chlorotetraazole (T,R)
220. Copper compounds (T)
221. *Copper cyanide, Cupric cyanide (T)
222. Copper nitrate, Cupric nitrate (T,F,R)
223. Copper sulfate, Cupric sulfate, Blue vitriol (T)
224. *Corcoron, ortho,ortho-Diethyl-ortho-3-chloro-4-methycoumarin-7-yl phosphate (T)
225. *Coumatetralyl, FUMARIN, 3-[1-(2-Furyl)-3-oxobutyl]-4-hydroxy-2H-1-benzopyran-2-one (T)
226. *Coumatetralyl, BAYER 25634, RACUMIN 57, 4-Hydroxy-3-(1,2,3,4-tetrahydro-1-naphthalenyl)-2H-1-benzopyran-2-one (T)
227. *Crinidine, CASTRIX, 2-Chloro-4-dimethylamino-6-methylpyrimidine (T)
228. *Crotonaldehyde, 2-Butenal (T)
229. Cumene, Isopropyl benzene (T,F)
230. Cumene hydroperoxide, alpha,alpha-Dimethylbenzyl hydroperoxide (T,F)
231. Cupriethylene diamine (T)
232. *Cyanide salts (T)
233. Cyanoacetic acid, Malonic nitrile (T)
234. *Cyanogen (T,F,R)
235. Cyanogen bromide, Bromine cyanide (T)
236. Cyanuric triazide (T,R)
237. Cycloheptane (T,F)
238. Cyclohexane (T,F)
239. Cyclohexanone peroxide (F)
240. *Cyclohexenyltrichlorosilane (T,C,R)
241. *Cycloheximide, ACTIDIONE (T)
242. *Cyclohexyltrichlorosilane (T,C,R)
243. Cyclopentane (T,F)
244. Cyclopentanol (F)
245. Cyclopentene (T,F)
246. DDT: 1,1,1-Trichloro-2,2-bis(chlorophenyl) ethane (T)
247. DDVP, Dichlorvos, VAPONA, Dimethyl dichlorovinyl phosphate (T)
248. *Decaborane (T,F,R)
249. DECALIN, Decahydronaphthalene (T)
250. Demeton, SYSTOX (T)
251. *Demeton-S-methyl sulfone, METALSYSTOX-SULFON, S-(2-ethylsulfonyl) ethyl O,O-dimethyl phosphorothioate (T)
252. Diazodinitrophenol, DDNP, 2-Diazo-4,6-dinitrobenzene-1-oxide (T,R)
253. Diborane, Diboron hexahydride (T,R)
254. *1,2-Dibromo-3-chloropropane, DBCP, FUMAZONE, NEMAGON (T)
255. n-Dibutyl ether, Butyl ether (and isomers) (T,F)
256. Dichlorobenzene (ortho, meta, para) (T)
257. 1,3-Dichlorobenzidine and salts, DCB (T)
258. 1,2-Dichloroethylene, 1,2-Dichloroethene (T,F)
259. Dichloroethyl ether, Dichloroether (T,F)
260. Dichloroisocyanuric acid, Dichloro-S-triazine-2,4,6-trione (T,F)
261. Dichloromethane, Methylene chloride (T)
262. *2,4-Dichlorophenoxyacetic acid, 2,4-D (T)
263. 1,2-Dichloropropane, Propylene dichloride (T,F)
264. 1,3-Dichloropropylene, 1,3-Dichloropropene (T,F)
265. Dicumyl peroxide (F,T)
266. Dieldrin: 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, exo-5,8-dimethanonaphthalene (T)
267. Diethylaluminum chloride, Aluminum diethyl monochloride, DEAC (F,R)
268. Diethylamine (T,F)
269. Diethyl chlorovinyl phosphate, Compound 1836 (T)
270. Diethyldichlorosilane (T,C,F,R)
271. Diethylene glycol dinitrate (T,R)
272. Diethylene triamine (T)
273. O,O-Diethyl-S-(isopropylthiomethyl) phosphorodithioate (T)
274. Diethylzinc, Zinc ethyl (C,F,R)
275. Difluorophosphoric acid (T,C,R)
276. Diglycidyl ether, bis(2,3-Epoxypropyl) ether (T)
277. Diisopropylbenzene hydroperoxide (T,F)
278. Diisopropyl peroxycarbonate, Isopropyl percarbonate (T,C,F,R)
279. Dimefox, HANANE, PEXTOX 14, Tetramethylphosphorodiamidic fluoride (T)
280. Dimethylamine, DMA (T,F)
281. Dimethylaminoazobenzene, Methyl yellow (T)
282. Dimethyldichlorosilane, Dichlorodimethylsilane (T,C,F,R)
283. 2,5-Dimethylhexane-2,5-Dihydroperoxide (F)
284. *1,1-Dimethylhydrazine, UDMH (T,F)
285. *Dimethyl sulfate, Methyl sulfate (T)
286. *Dimethyl sulfide, Methyl sulfide (T,F,R)
287. 2,4-Dinitroaniline (T)
288. Dinitrobenzene (ortho, meta, para) (T,R)
289. Dinitrochlorobenzene, 1-Chloro-2,4-dinitrobenzene (T,R)
290. *4,6-Dinitro-ortho-cresol, DNPC, SINOX, EGOTOL 30 (T)

292. *Dinitrophenol, 2,4- and 2,6-isomers (T,R)
 293. 2,4-Dinitrophenylhydrazine (T,F,R)
 294. Dinitrotoluene, 2,4- and 2,6-isomers (T,F,R)
 295. DINOSEB, 2,4-Dinitro-6-sec-octylphenol (T)
 296. 1,4-Dioxane, 1,4-Dioxolene dioxide (T,F,R)
 297. *Disulfoton, DELNAVSS-1,4-dioxane-2,3-diyl bis-O,O-diethyl phosphorodithioate (T)
 298. Dipentaerythritol hexanitrate (R)
 299. *Diphenyl, Biphenyl, Phenylbenzene (T)
 300. Diphenylamine, DPA, N-Phenylaniline (T)
 301. *Diphenylamine chloroarsine, Phenarsine chloride (T)
 302. *Diphenylchlorosilane (T,C,R)
 303. Dipicrylamine, Hexanitrodiphenylamine (T,R)
 304. Dipropyl ether (T,F)
 305. *Disulfoton, DISYSTON, O,O-Diethyl S-[2-ethylthio-ethyl] phosphorodithioate (T)
 306. *Dodecylchlorosilane (T,C,R)
 307. *DOWCO-139, ZECTRAN, Hexacarbamate, 4,4-Dimethylamino-3,5-dimethylphenyl methycarbamate (T)
 309. *DYFONATE, Fonofos, O-Ethyl-S-phenylethyl phosphorodithioate (T)
 310. *Endosulfan, THIODAN, 6,7,8,9,10,10-Hexachloro-1,3,5a,6,9,9a-hexahydro-6,8-methano-2,4,5-benzodioxathiepin-3-one (T)
 311. *Endothal, 7-Oxabicyclo [2,2,1]heptane-2,5-dicarboxylic acid (T)
 312. *Endothion, EXOTHION, S-[5-Methoxy-4-oxo-4H-pyran-2-yl]-methyl O,O-dimethyl phosphorothioate (T)
 313. *Ecdryn, 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-endo-5,5-dimethanonaphthalene (T)
 314. Epichlorohydrin, Chloropropylene oxide (T,F)
 315. *EPN, O-Ethyl O-para-nitrophenyl phenylphosphonothioate (T)
 316. *Ethion, NIALATE, O,O,O',O'-Tetraethyl-S-S-metvinene diuposphorodithioate (T)
 317. Ethyl acetate (T,F)
 318. Ethyl alcohol, Ethanol (T,F)
 319. Ethylamine, Aminoethane (T,F)
 320. Ethylbenzene, Phenylethane (T,F)
 321. Ethyl butyrate, Ethyl butanoate (F)
 322. Ethyl chloride, Chloroethane (T,F)
 323. *Ethyl chloroformate, Ethyl chlorocarbonate (T,C,F,R)
 324. *Ethylchloroarsine, Dichloroethylarsine (T,R)
 325. *Ethylchlorosilane (T,C,F,R)
 326. *Ethylene cyanohydrin, beta-Hydroxypropionitrile (T,R)
 327. Ethylene diamine (T)
 328. Ethylene dibromide, 1,2-Dibromoethane (T)
 329. Ethylene dichloride, 1,2-Dichloroethane (T,F)
 330. *Ethyleneimine, Aziridine, EI (T,F,R)
 331. Ethylene oxide, Epoxethane (T,F,R)
 332. Ethyl ether, Diethyl ether (F,R)
 333. Ethyl formate (T,F)
 334. *Ethyl mercaptan, Ethanethiol (T,F,R)
 335. Ethyl nitrate (F,R)
 336. Ethyl nitrite (F,R)
 337. *Ethylphenylchlorosilane (T,C,R)
 338. Ethyl propionate (F)
 339. *Ethyltrichlorosilane (T,R)
 340. *Fensulfotion, BAYER 25141, DASANTT, O,O-Diethyl-O-[4-(methylsulfinyl)phenyl] phosphorothioate (T)
 341. *Ferric arsenate (T)
 342. Ferric chloride, Iron (III) chloride (T,C)
 343. *Fermus arsenate, Iron arsenate (T)
 344. *Fluoboric acid, Fluoroboric acid (T,C)
 345. Fluoride salts (T)
 346. *Fluorine (T,C,R)
 347. *Fluoroacetanilide, AFL 1082 (T)
 348. *Fluoroacetic acid and salts, Compound 1080 (T)
 349. *Fluorosulfonic acid, Fluosulfonic acid (T,C,R)
 350. Formaldehyde, Methanal (T,F)
 351. Formic acid, Methanoic acid (T,C)
 352. Fulminate of mercury, Mercuric cyanate (T,R)
 353. *FURADAN, NIA 10,242, Carbofuran, 2,3-Dihydro-2,2-dimethyl-7-benzofuran-ylmethylcarbamate (T)
 354. Furan, Furfuran (T,F,R)
 355. Gasoline (F)
 356. *GB, O-Isopropyl methyl phosphoryl fluoride (T)
 357. Glutaraldehyde (T)
 358. Glycerolmonolactate trinitrate (R)
 359. Glycol dinitrate, Ethylene glycol dinitrate (R)
 360. Gold fulminate, Gold cyanate (R)
 361. Guanidine nitrate (F,R)
 362. Guanyl nitrosammonoguanilydene hydrazine (R)
 363. *Guthion, O,O-Dimethyl-S-4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl phosphorodithioate (T)
 364. Haffium (T,C,R)
 365. *Heptachlor, 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanonedene (T)
 366. n-Heptane (and isomers) (T,F)
 367. 1-Heptene (and isomers) (T,F)
 368. *Hexaacyclicchlorosilane (T,C,R)
 369. Hexamethyl tetraphosphate, HETP (T)
 370. Hexafluoroposphonic acid (T,C)
 371. Hexamethylenediamine, 1,6-Diaminohexane (T)
 372. n-Hexane (and isomers) (T,F)
 373. 1-Hexene (and isomers) (T,F)
 374. n-Hexylamine, 1-Aminohexane (and isomers) (T,F)
 375. *Hexyltrichlorosilane (T,C,R)
 376. *Hydrazine, Diamine (T,F)
 377. Hydrazine azide (T,R)
 378. Hydrazoic acid, Hydrogen azide (T,R)
 379. *Hydroiodic acid, Hydrogen iodide (T,C,R)
 380. *Hydrobromic acid, Hydrogen bromide (T,C,R)
 381. *Hydrochloric acid, Hydrogen chloride, Muriatic Acid (T,C,R)
 382. *Hydrocyanic acid, Hydrogen cyanide (T,F,R)
 383. *Hydrofluoric acid, Hydrogen fluoride (T,C,R)
 384. *Hydrofluosulfic acid, Fluosulfic acid (T,C)
 385. Hydrogen peroxide (T,C,F,R)
 386. *Hydrogen selenide (T,F)
 387. *Hydrogen sulfide (T,F)
 388. *Hypochlorite compounds (T,C,F,R)
 389. Indium (T)
 390. Indium compounds (T)
 391. Iodine monochloride (T,C,R)
 392. Isooctane, 2,2,4-Trimethylpentane (T,F)
 393. Isooctene (mixture of isomers) (F)
 394. Isopentane, 2-Methylbutane (F)
 395. Isoprene, 2-Methyl-1,3-butadiene (T,F,R)
 396. Isopropanol, Isopropyl alcohol, 2-Propanol (T,F)
 397. Isopropyl acetate (T,F)
 399. Isopropylamine, 2-Aminopropane (T,F)
 400. Isopropyl chloride, 2-Chloropropane (F)
 401. Isopropyl ether, Diisopropyl ether (F,R)
 402. Isopropyl mercaptan, 2-Propanethiol (T,F)
 404. *meta-Isopropylphenyl-N-methylcarbamate, Ac 5,727 (T)
 405A. *Kepone, 1,1,1,3,3a,4,5,5,5a,6-Decachlorooctahydro-1,2,4-metheno-2H-cyclobuta (cd) pentalen-2-one, Chlorecone (T)
 405B. Lauroyl peroxide, Di-n-dodecyl peroxide (T,C,F,R)
 406. Lead compounds (T)
 407. Lead acetate (T)
 408. *Lead arsenate, Lead orthoarsenate (T)
 409. *Lead arsenite (T)
 410. Lead azide (T,R)
 411. Lead carbonate (T)
 412. Lead chloride (T,R)
 413. *Lead cyanide (T)
 414. Lead 2,4-dinitroresorcinate (T,R)
 415. Lead mononitroresorcinate (T,R)
 416. Lead nitrate (T,F)
 417. Lead oxide (T)
 418. Lead stypnate, Lead trinitroresorcinate (T,R)
 419. *Lewiste, beta-Chlorovinyl dichloroarsine (T)
 420. *Lithium (C,F,R)
 421. *Lithium aluminum hydride, LAH (C,F,R)
 422. *Lithium amide (C,F,R)
 423. *Lithium ferrosilicon (F,R)
 424. *Lithium hydride (C,F,R)
 425. *Lithium hypochlorite (T,C,F,R)
 426. Lithium peroxide (C,F,R)
 427. Lithium silicon (F,R)
 428. *London purple, Mixture of arsenic trioxide, aniline, lime, and ferrous oxide (T)
 429. *Magnesium (F,R)
 430. *Magnesium arsenate (T)
 431. *Magnesium arsenite (T)
 432. *Magnesium chlorate (F,R)
 433. *Magnesium nitrate (F,R)
 434. *Magnesium perchlorate (T,F,R)
 435. *Magnesium peroxide, Magnesium dioxide (F)
 436. *Maleic anhydride (T)
 437. Manganese (powder) (F)
 438. Manganese acetate (T)
 439. *Manganese arsenate, Manganous arsenate (T)
 440. Manganese bromide, Manganous bromide (T)
 441. Manganese chloride, Manganous chloride (T)

572. n-Pentane and isomers (T,F)
 573. 2-Pentanone, Methyl propyl ketone and isomers (T,F)
 574. Peracetic acid, Peroxyacetic acid (T,C,F,R)
 575. Perchloric acid (T,C,F,R)
 576. Perchloroethylene, Tetrachloroethylene (T)
 577. *Perchloromethyl mercaptan, Trichloromethylsulfenyl chloride (T)
 578. Perchloro fluoride (T,C,F)
 580. Phenol, Carboic acid (T,C)
 581. *Phenylchloroarsane (T,I)
 582. Phenylhydrazine, Diaminobenzene (ortho,meta,para) (T)
 583. Phenylhydrazine hydrochloride (T)
 584. *Phenylphenol, Ortho-phenol DOWICIDE 1 (T)
 585. *Phenyltrichlorosilane (T,R)
 586. *Phosphate, THIMET, O,O-Diethyl-S-[(Ethythio) methyl] phosphorodithioate (T)
 587. *Phosphoric acid, CYOLAN, 2-Diethoxyphosphorinanium-1,3-dithiolane (T)
 588. *Phosgene, Carbonic chloride (T,R)
 589. *Phosphamidon, DIMECRON, 2-Chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate (T)
 590. *Phosphine, Hydrogen phosphide (T,F)
 591. Phosphoric acid (C)
 592. Phosphoric anhydride, Phosphorus pentoxide (C,F)
 593. Phosphorus (amorphous, red) (T,F,R)
 594. *Phosphorus (white or yellow) (T,F,R)
 595. *Phosphorus oxybromide, Phosphoryl bromide (T,C,R)
 596. *Phosphorus oxychloride, Phosphoryl chloride (T,C,R)
 597. *Phosphorus pentachloride, Phosphoric chloride (T,C,F,R)
 598. *Phosphorus pentasulfide, Phosphoric sulfide (T,C,F,R)
 599. *Phosphorus sesquisulfide, Tetraphosphorus trisulfide (T,C,F,R)
 600. *Phosphorus tribromide (T,C,R)
 601. *Phosphorus trichloride (T,C,R)
 602. Picramide, Trinitroamine (T,R)
 603. Picric acid, Trinitrophenol (T,R)
 604. Picryl chloride, 2-Chloro-1,3,5-trinitrobenzene (T,R)
 605. *Platinum compounds (T)
 606. *Polychlorinated biphenyls, PCB, Askarel, AROCLOR, CHLOREX-TOL, INERTEEN, PYRANOL (T)
 607. Polyvinyl nitrate (T,F,R)
 608. POTASAN; O,O-Diethyl-O-(4-methylumbelliferone) phosphorothioate (T)
 609. *Potassium (C,F,R)
 610. *Potassium arsenate (T)
 611. *Potassium arsenite (T)
 612. *Potassium bifluoride, Potassium acid fluoride (T,C)
 613. Potassium binoxalate, Potassium acid oxalate (T)
 614. Potassium bromate (T,F)
 615. *Potassium cyanide (T)
 616. Potassium dichloroisocyanurate (T,F)
 617. Potassium dichromate, Potassium bichromate (T,C,F)
 619. Potassium fluoride (T)
 620. *Potassium fluoride (C,F,R)
 621. Potassium hydroxide, Caustic potash (T,C)
 622. Potassium nitrate, Saltpeter (F,R)
 623. Potassium nitrite (F,R)
 624. Potassium oxalate (T)
 625. Potassium perchlorate (T,F,R)
 626. Potassium permanganate (T,C,F)
 627. Potassium peroxide (C,F,R)
 628. Potassium sulfide (T,F)
 629. *Propargyl bromide, 3-Bromo-1-propyne (T,F)
 630. *beta-Propiolactone, BPL (T)
 631. Propionaldehyde, Propanal (T,F)
 632. Propionic acid, Propanoic acid (T,C,F)
 633. n-Propyl acetate (T,F)
 634. n-Propyl alcohol, 1-Propanol (T,F)
 635. n-Propylamine and isomers (T,F)
 636. *Propyleneimine, 2-Methylaziridine (T,F)
 637. Propylene oxide (T,F)
 638. n-Propyl formate (T,F)
 639. n-Propyl mercaptan, 1-Propanethiol (T,F)
 640. *n-Propyltrichlorosilane (T,C,F,R)
 641. *Prothoate, POSTION, FAC, O,O-Diethyl-S-carboethoxyethyl phosphorodithioate (T)
 642. Pyridine (T,F)
 643. *Pyrosulfuryl chloride, Disulfuryl chloride (T,C,R)
 644. *Quinone, 1,4-Benzquinone (T)
 645. Ranev nickel (F)
 646. *Schradan, Octamethyl pyrophosphoramide, OMPA (T)
 647A. *Selenium (T)
 647B. *Selenium compounds (T)
 648. *Selenium fluoride (T)
 649. *Selenous acid, Selenious acid and salts (T)
 650. *Silicon tetrachloride, Silicon chloride (T,C,R)
 651. *Silver acrylide (T,R)
 652. Silver azide (T,R)
 653. Silver compounds (T)
 654. Silver nitrate (T)
 655. Silver stannate, Silver trinitroresorcinate (T,R)
 656. Silver tetrazone (T,R)
 657. *Sodium (C,F,R)
 658. Sodium aluminate (C)
 659. *Sodium aluminum hydride (C,F,R)
 660. *Sodium amide, Sodamide (C,F,R)
 661. *Sodium arsenate (T)
 662. *Sodium arsenite (T)
 663. Sodium azide (T,R)
 664. *Sodium bifluoride, Sodium acid fluoride (T,C)
 665. Sodium bromate (T,F)
 666. *Sodium cacodylate, Sodium dimethylarsenate (T)
 667. Sodium carbonate peroxide (F)
 668. Sodium chlorate (T,F)
 669. Sodium chlorite (T,F)
 670. Sodium chromate (T,C)
 671. *Sodium cyanide (T)
 672. Sodium dichloroisocyanurate (F)
 673. Sodium dichromate, Sodium bichromate (T,C,F)
 674. Sodium fluoride (T)
 675. *Sodium hydride (T,C,F,R)
 676. Sodium hydrosulfite, Sodium hyposulfite (F)
 677. Sodium hydroxide, Caustic soda, Lye (T,C)
 678. *Sodium hypochlorite (T,F,R)
 679. *Sodium methiate, Sodium methoxide (C,F,R)
 680. Sodium molybdate (T)
 681. Sodium nitrate, Soda niter (T,F,R)
 682. Sodium nitrite (T,F,R)
 683. Sodium oxide, Sodium monoxide (T,C)
 684. Sodium perchlorate (T,F,R)
 685. Sodium permanganate (T,F)
 686. *Sodium peroxide (T,F,R)
 687. Sodium picramate (T,F,R)
 688. *Sodium potassium alloy, NaK, Naek (C,F,R)
 689. *Sodium selenate (T)
 690. Sodium sulfide, Sodium hydrosulfide (T,F)
 691. Sodium thiocyanate, Sodium sulfocyanate (T)
 692. Stannic chloride, Tin tetrachloride (T,C)
 693. *Strontium arsenate (T)
 694. Strontium nitrate (T,F,R)
 695. Strontium peroxide, Strontium dioxide (F,R)
 696. *Strychnine and salts (T)
 697. Styrene, Vinylbenzene (T,F)
 698. Succinic acid peroxide (T,F)
 699. Sulfide salts (soluble) (T)
 700. *Sulfotepp, DITHIONE, BLADAFUM, Tetraethyl dithiopyrophosphate, TEDP (T)
 701. *Sulfur chloride, Sulfur monochloride (T,C,R)
 702. *Sulfur mustard (T,C,R)
 703. *Sulfur pentafluoride (T,C)
 704. Sulfur trioxide, Sulfuric anhydride (T,C,F)
 705. Sulfuric acid, Oil of vitriol, Battery acid (T,C)
 706. Sulfurous acid (T,C)
 707. *Sulfuryl chloride, Sulfonyl chloride (T,C,R)
 708. *Sulfuryl fluoride, Sulfonyl fluoride (T,C,R)
 709. *SUPRACIDE, ULTRACIDE, S-[5-Methoxy-2-oxo-1,3,4-thiadiazol-3(2H)-yl] methyl]-O,O-dimethyl phosphorodithioate (T)
 710. *SURECIDE, Cyanophenphos, O-para-Cyanophenyl-O-ethyl phenyl phosphonothioate (T)

**Article 10. Extremely Hazardous Wastes
and Extremely Hazardous Materials**

66685. [Repealed]

**Article 11. Criteria for Identification of
Hazardous
and Extremely Hazardous Wastes****66693. Applicability of Hazardous Waste
Criteria.**

Any waste which is hazardous pursuant to any of the criteria set forth in this article is a hazardous waste and shall be managed in accordance with the provisions of this chapter.

66694. Sampling and Sample Management.

Sampling and sample management of the wastes and other materials for analysis and testing pursuant to the criteria of this article shall be in accord with the sampling planning, methodology and equipment, and the sample processing, documentation and custody procedures specified in Section One of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982.

66696. Toxicity Criteria.

(a) A waste, or a material, is toxic and hazardous if it:

- (1) Has an acute oral LD_{50} less than 5,000 milligrams per kilogram; or
- (2) Has an acute dermal LD_{50} less than 4,300 milligrams per kilogram; or
- (3) Has an acute inhalation LC_{50} less than 10,000 parts per million as a gas or vapor; or

(4) Has an acute aquatic 96-hour LC_{50} less than 500 milligrams per liter when measured in soft water (total hardness 40 to 48 milligrams per liter of calcium carbonate) with fathead minnows (*Pimephales promelas*), rainbow trout (*Salmo gairdneri*) or golden shiners (*Notemigonus crysoleucas*) according to procedures described in Part 800 of "Standard Methods for the Examination of Water and Wastewater (15th Edition)", American Public Health Association, 1981, or by other test methods or test fish approved by the Department, using test samples prepared or meeting the conditions for testing as prescribed in Section 66700(c) and (d), and solubilized, suspended, dispersed or emulsified by the procedures recommended in Part 800 of the cited text or by other methods approved by the Department; or

(5) Contains any of the following substances at a single or combined concentration equal to or exceeding 0.001 percent by weight:

- (A) 2-Acetylaminofluorene (2-AAF)
- (B) Acrylonitrile
- (C) 4-Aminodiphenyl
- (D) Benzidine and its salts
- (E) bis (Choloromethyl) ether (BCME)
- (F) Methyl chloromethyl ether
- (G) 1,2-Dibromo-3-chloropropane (DBCP)
- (H) 3,3'-Dichlorobenzidine and its salts (DCB)
- (I) 4-Dimethylaminoazobenzene (DAB)
- (J) Ethyleneimine (EL)
- (K) α -Naphthylamine (1-NA)
- (L) β -Naphthylamine (2-NA)
- (M) 4-Nitrobiphenyl (4-NBP)
- (N) N-Nitrosodimethylamine (DMN)
- (O) β -Propiolactone (BPL)
- (P) Vinyl chloride (VCM); or
- (6) Has been shown through experience or testing to pose a hazard to human health or environment because of its car-

cinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties or persistence in the environment; or

(7) Is listed in 40 CFR 261 (codified July 1, 1972) as a hazardous waste which is:

(A) From a nonspecific source listed in Section 261.31; or

(B) From a specific source listed in Section 261.32; or

(C) An acute hazardous commercial chemical product or manufacturing chemical intermediate listed in Section 261.33(e); or

(D) A toxic commercial chemical product or manufacturing chemical intermediate listed in Section 261.33(f).

(b) A waste containing one or more materials which are toxic according to the criterion of subsection (a)(3) of this section may be classified as nonhazardous pursuant to Section 66305 if the waste is not hazardous by any other criterion of this article and its head space vapor contains no such toxic materials in concentrations exceeding their respective eight-hour inhalation LC_{50} or their LC_{50} . The head space vapor of a waste shall be prepared, and two milliliters of it shall be sampled using a five milliliter gas-tight syringe, according to method 5020 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982. The quantity of each material in milligrams, which is toxic according to the criterion of paragraph (a)(3) of this section, in the sampling syringe shall be determined by comparison to liquid standard solutions according to the appropriate gas chromatographic procedures in method 8010, 8015, 8020 or 8030 in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982. The concentration of

Chromium (VI) compounds	5	500
Chromium and/or chromium (III) compounds	550	2,500
Cobalt and/or cobalt compounds	50	500
Copper and/or copper compounds	25	250
Fluoride salts	150	15,000
Lead and/or lead compounds	50	1,000
Mercury and/or mercury compounds	0.2	20
Molybdenum and/or molybdenum compounds	350	3,500
Nickel and/or nickel compounds	20	2,000
Selenium and/or selenium compounds	10	100
Silver and/or silver compounds	5	500
Thallium and/or thallium compounds	70	700
Vanadium and/or vanadium compounds	24	2,400
Zinc and/or zinc compounds	250	2,500

* STLC and TTLC values are calculated on the concentrations of the elements, not the compounds.

† In the case of asbestos and elemental metals, applies only if they are in a friable, powdered or finely divided state. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

†† Excluding barium sulfate.

(c) List of Organic Persistent and Bioaccumulative Toxic Substances and Their Soluble Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC) Values.

Substance	STLC mg/l	TTLC Wet Weight mg/kg
Aldrin	0.14	1.4
Chlordan	0.25	2.5
DDT, DDE, DDD	0.1	1.0
2,4-Dichlorophenoxyacetic acid	10	100
Dieldrin	0.8	8.0
Dioxin (2,3,7,8-TCDD)	0.001	0.01
Endrin	0.02	0.2
Heptachlor	0.47	4.7
Kepone	2.1	21
Lead compounds, organic	-	13
Lindane	0.4	4.0
Methoxychlor	10	100
Mirex	2.1	21
Pentachlorophenol	1.7	17
Polychlorinated biphenyls (PCBs)	5.0	50
Toxaphene	0.5	5
Trichloroethylene	204	2,040
2,4,5-Trichlorophenoxypropionic acid	10	10

test?

66700. Waste Extraction Test (WET).

(a) The WET described in this section shall be used to determine the amount of extractable substance in a waste or other material as set forth in Section 66699(a).

(b) Except as provided in Section 66700(d), the WET shall be carried out if the total concentration in the waste, or other material, of any substance listed in Section 66699 equals or exceeds the STLC value, but does not exceed the TTLC value, given for that substance. The

total concentration of substances listed in Section 66699 shall be determined by analysis of samples of wastes, or other materials, which have been prepared, or meet the conditions, for analysis as set forth in subsections (c) and (d) of this section. Methods used for analysis for total concentrations of substances listed in Section 66699 shall be those given in the following documents or alternate methods that have been approved by the Department pursuant to Section 66310(e):

(1) For metal elements and their compounds, the waste shall be digested ac-

cording to the indicated methods described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982:

(A) All listed metal elements and their compounds, except hexavalent chromium Method 3050.

(B) Hexavalent chromium: Method 3060.

(2) For the following substances, the indicated methods as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 2nd

(f) The extraction procedure shall be as follows:

(1) Fifty grams of sample, or less if it is a type ii sample prepared pursuant to subsection (c) (2), obtained pursuant to subsection (c) or (d) of this section shall be placed in a clean polyethylene or glass container designated the Treatment, capable of physically withstanding the extraction procedure and which was rinsed previously with, in succession, an aqueous 1:1 ratio by volume nitric acid solution and deionized water. If the extract will be analyzed for any of the organic substances listed in Section 66699 (c), a glass container shall be used. Furthermore, a container of the same size, shape and material shall be used for an extraction designated as the Blank, which shall be carried through the same procedure as the Treatment, but without addition of the sample.

(2) Five hundred milliliters of extraction solution, or less if the waste sample is a type ii sample prepared pursuant to subsection (c)(2) shall be added to the Treatment and Blank containers, which shall be then fitted with covered air scrubbers extended well into the extraction solutions and flushed vigorously with nitrogen gas for 15 minutes so as to remove and exclude atmospheric oxygen from the extraction medium. If the sample is to be analyzed for any volatile substance, such as trichloroethylene, the sample shall be added after deaeration with nitrogen to avoid volatilization loss. After deaeration the containers shall be quickly sealed with tightly fitting caps and agitated, using a table shaker, an overhead stirrer or a rotary extractor, operated at a speed which shall maintain the sample in a state of vigorously agitated suspension. Required equipment is described in test method 1310 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982. The temperature during the extraction shall be maintained between 20 and 40 degrees centigrade. After 48 hours of extracting, the contents of the Treatment and Blank containers shall be either filtered directly or centrifuged and then filtered. Filtering shall be through a medium porosity pre-filter and then through a 0.45 micron membrane filter, using a clean, thick-walled suction flask. For coarser solids, prefiltration shall not be necessary. Pressure filtration shall be an optional alternative to vacuum filtration. If the extracts are first centrifuged, glass or polyethylene bottles shall be used as prescribed for extraction. For very fine solids, centrifuging at as high as 10,000 X G may be necessary. After centrifugation, the liquids shall be decanted, prefiltered if necessary,

and then passed through a 0.45 micron membrane filter. All filters shall be of low and identified extractable heavy metals, fluoride and organic chemicals content.

(3) If the filtered extracts are to be analyzed only for the metal elements listed in Section 66699(b), the filtered extracts from the Treatment and Blank shall be transferred to clean polyethylene bottles and acidified with nitric acid to five percent by volume acid content soon after each extract is filtered. For those wastes or waste materials classified under subsection (c)(2), the Treatment shall be the Initial Filtrate combined with the extract generated by the WET extraction of the initially separated solids. Similarly the Blank in this instance shall be the filtrate generated by the WET Blank accompanying the initially separated solids, to which is subsequently added a volume of deionized water equivalent to that of the Initial Filtrate. These procedures shall be followed prior to acidification of Treatment and Blank solutions with nitric acid to five percent (by volume) acid content. The bottle shall then be stored at room temperature or frozen. If the extracts are also to be analyzed for the organic substances listed in Section 66699(c), or for the organic substances only, the filtered extracts shall be transferred to clean glass bottles. If the extracts are to be analyzed for fluoride, they shall be transferred to clean polyethylene bottles. These extracts, containing organic substances or fluoride, shall not be acidified, but shall be frozen soon after each extract is obtained and held frozen until the day of analysis, unless the extracts are analyzed within 24 hours.

(g) Sample analysis and data treatment shall be as follows:

(1) Each of the filtered extracts from the Treatment and Blank extractions shall have been acidified to five percent by volume nitric acid, and stored at room temperature or frozen in polyethylene bottles or kept frozen without addition of acid in glass bottles until the day of analysis, as prescribed. Each of the extracts shall be thoroughly mixed just prior to being individually analyzed for the substances listed in Section 66699 in order to determine whether the extractable concentration (EC) in the waste or other material exceeds the STLC for any of the substances listed. The extracts shall be analyzed according to the procedures identified in Sections 66700(b)(2), (b)(3) and (b)(4).

(2) The net EC of a substance in the Treatment sample which is listed in Section 66699 shall be calculated and reported as milligrams per liter of sample (mg/l). This value is derived after subtracting the concentration of the substance

in the appropriate Blank extract from that concentration determined in the Treatment extract.

66702. Ignitability Criteria.

(a) A waste, or a material, is ignitable and hazardous if it:

(1) Is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60 degrees centigrade (140 degrees Fahrenheit), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in American Society for Testing and Materials (ASTM) Standard D-93-79, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-73; or

(2) Is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard; or

(3) Is a flammable compressed gas as defined in 49 CFR 173.300(b) (codified October 1, 1982) and as determined by the test methods described in that regulation; or

(4) Is an oxidizer as defined in 49 CFR 173.151 (codified October 1, 1982).

66705. Reactivity Criteria.

(a) A waste, or a material, is reactive and hazardous if it:

(1) Is normally unstable and readily undergoes violent change without detonating; or

(2) Reacts violently with water; or

(3) Forms potentially explosive mixtures with water; or

(4) Generates toxic gases, vapors or fumes, when mixed with water, in a quantity sufficient to present a danger to human health or the environment; or

(5) Is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, generates toxic gases, vapors or fumes in a quantity sufficient to present a present a danger to human health or the environment; or

(6) Is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement; or

(7) Is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(8) Is a forbidden explosive as defined in 49 CFR 173.51 (codified October 1, 1982), or a Class A explosive as defined in 49 CFR 173.53 (codified October 1, 1982), or a Class B explosive as defined in 49 CFR 173.88 (codified October 1, 1982).

66708. Corrosivity Criteria.

(a) A waste, or a material, is corrosive and hazardous if it:

(1) Is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, or its mixture with an equivalent weight of water produces a solution having a pH less than or equal to 2 or greater than or equal to 12.5. The pH shall be determined by a pH meter using either test method 9040 specified in "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846. U.S. Environmental Protection Agency, 2nd edition, 1982, or as described in "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, March 1979; or

(2) Is a liquid, or when mixed with an equivalent weight of water produces a liquid, and corrodes steel (SAE 1020) at a rate greater than 6.35 millimeters (0.250 inch) per year at a test temperature of 55 degrees centigrade (130 degrees Fahrenheit) as determined by the test method specified in the National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized as test method 1110 in "Text Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846. U.S. Environmental Protection Agency, 2nd edition, 1982.

66717. Applicability of Extremely Hazardous Waste Criteria.

Any waste which is extremely hazardous pursuant to any of the criteria of Section 66720 or 66723 is an extremely hazardous waste and shall be managed in accordance with the provisions of this chapter.

66720. Extremely Hazardous Criteria.

(a) A waste, or a material, is extremely hazardous if it:

(1) Has an acute oral LD_{50} less than or equal to 50 milligrams per kilogram; or

(2) Has an acute dermal LD_{50} less than or equal to 43 milligrams per kilogram; or

(3) Has an acute inhalation LC_{50} less than or equal to 100 parts per million as a gas or vapor; or

(4) Contains any of the substances listed in Section 66696(a) (5) at a single or combined concentration equal to or exceeding 0.1 percent by weight; or

(5) Has been shown through experience or testing to pose an extreme hazard to the public health because of its carcinogenicity, high acute or chronic toxicity, bioaccumulative properties, or persistence in the environment; or

(6) Is water-reactive.

(b) A waste containing one or more materials which are extremely toxic according to any criterion of paragraphs (a)(1) or (a)(2) of this section may be classified by the Department as not extremely hazardous if neither the calculated acute oral toxicity nor the calculated acute dermal toxicity of the waste using the equation in Section 66696(c) is numerically equal to or less than the toxicity limits prescribed in paragraphs (a)(1) or (a)(2) of this section and the waste is not extremely hazardous by any other criterion of this section.

Substance

Substance	TTLC Weight in mg/kg
Aldrin	140
Arsenic and/or arsenic compounds	50,000 (as As)
Beryllium and/or beryllium compounds*	7,500 (as Be)
Cadmium and/or cadmium compounds*	10,000 (as Cd)
Chlordane	250
2,4-Dichlorophenoxyacetic acid	10,000
Dieldrin	500
Dioxin (2,3,7,8-TCDD)	1
Endrin	20
Heptachlor	470
Kepone	2,100
Lead compounds, organic	1,200 (dry weight basis; as Pb)
Lindane	400
Mercury and/or mercury compounds	2,000 (as Hg)
Mirex	2,100
Polychlorinated biphenyls (PCBs)	5,000
Selenium and/or selenium compounds*	10,000 (as Se)
Thallium and/or thallium compounds*	70,000 (as Tl)
Toxaphene	500
2,4,5-Trichlorophenoxypropionic acid	1,000

* In the case of elemental metals, applies only if they are in a friable, powdered or finely divided state.

66740. List of Special Wastes.

(a) The following is a noninclusive list of wastes which shall be classifiable as special wastes pursuant to Section 66744 provided they meet the criteria and requirements of Section 66742:

(1) Ash from burning of fossil fuels, biomass and other combustible materials.

(2) Auto shredder waste.

(3) Baghouse and scrubber wastes from air pollution control.

(4) Catalyst from petroleum refining and chemical plant processes.

(5) Cement kiln dust.

(6) Dewatered sludge from treatment of industrial process water.

(7) Dewatered tannery sludge.

(8) Drilling mud from drilling of gas and oil wells.

(9) Refractory from industrial furnaces, kilns and ovens.

(10) Sand from sandblasting.

66723. Total Threshold Limit Concentration Values of Persistent and Bioaccumulative Toxic Substances in Extremely Hazardous Wastes.

(a) Any waste containing a substance listed in subsection (b) of this section at a concentration equal to or exceeding its listed total threshold limit concentration is an extremely hazardous waste.

(b) List of Persistent and Bioaccumulative Toxic Substances and Their Total Threshold Limit Concentration (TTLC) Values.

Substance	TTLC Weight in mg/kg
Aldrin	140
Arsenic and/or arsenic compounds	50,000 (as As)
Beryllium and/or beryllium compounds*	7,500 (as Be)
Cadmium and/or cadmium compounds*	10,000 (as Cd)
Chlordane	250
2,4-Dichlorophenoxyacetic acid	10,000
Dieldrin	500
Dioxin (2,3,7,8-TCDD)	1
Endrin	20
Heptachlor	470
Kepone	2,100
Lead compounds, organic	1,200 (dry weight basis; as Pb)
Lindane	400
Mercury and/or mercury compounds	2,000 (as Hg)
Mirex	2,100
Polychlorinated biphenyls (PCBs)	5,000
Selenium and/or selenium compounds*	10,000 (as Se)
Thallium and/or thallium compounds*	70,000 (as Tl)
Toxaphene	500
2,4,5-Trichlorophenoxypropionic acid	1,000

(11) Sand from foundry casting.

(12) Slag from coal gasification.

(13) Sulfur dioxide scrubber waste from flue gas emission control in combustion of fossil fuels.

(14) Tailings from the extraction, beneficiation and processing of ores and minerals.

66742. Criteria and Requirements of a Special Waste.

(a) A waste which meets all of the following criteria and requirements may be classified as a special waste pursuant to Section 66744:

(1) It is a solid, a water-based sludge or a water-based slurry, of which the solid constituents are substantially insoluble in water.

(2) It is a hazardous waste only because:

(A) It contains a persistent or bioaccumulative substance listed in Section

APPENDIX B

CONNECTICUT CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>16. Connecticut requires the use of the state version of the federal Uniform Hazardous Waste Manifest and imposes additional reporting requirements [Regulations of Connecticut State Agencies 22a-449(c)-5 and 6(b)].</p> <p>21 Generators who ship waste offsite must submit an annual report if so requested by the DEP Commissioner [RCSA 22a-449(c)-9(b)].</p> <p>24. Connecticut imposes additional requirements on small quantity generators, which are persons who generate between 100 and 1,000 kg/month [RCSA 22a-449(c)-2].</p>	<ul style="list-style-type: none"> ● Verify that the facility sends a copy of each manifest to the Connecticut Department of Environmental Protection (DEP) and to the destination state within 3 working days of the shipment of the hazardous waste as determined by the postmark. ● Verify that exception reports are filed with the DEP if the generator has not received a signed copy of the manifest within 20 working days of shipment. ● Determine if the Commissioner has requested an annual report from the facility, and, if so, verify that this report is sent. ● If the facility is a small quantity generator, verify that their hazardous wastes are treated or disposed of in a hazardous waste facility rather than a municipal solid waste landfill. ● Verify that the facility submits an annual report to the DEP by 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
24. Continued	<p>March 1 for the previous year. Verify that the report contains the following information:</p> <ul style="list-style-type: none"> - name and address of the small quantity generator; - type and estimated quantity of hazardous waste generated during the reporting year; - name, physical location, mailing address, and hazardous waste identification number of the hazardous waste transporter that received the waste for shipment to the hazardous waste facility; and - name, physical location, mailing address, and hazardous waste identification number of the hazardous waste facilities that received the waste for treatment, storage, or disposal. 		
25. Every hazardous waste transporter who hauls hazardous waste in or through Connecticut must obtain a permit from the DEP, unless the transporter is the generator, transports less than 1,000 kg/mo,	<ul style="list-style-type: none"> ● Verify that any transporter used has a valid DEP transporter license. 		

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<p>and uses his own equipment [RCSA 25-54cc(c)-11].</p> <p>28a. TSD facilities must be authorized by the state to operate and have a state identification number [RCSA 22a-449(c)-15].</p> <p>28b. TSD facilities must inform each contributing generator (except those generators who are owned by the TSD facility) in writing that the facility has all appropriate permits and will accept the generator's waste [RCSA 22a-449(c)-20(b)].</p> <p>36. TSD facilities must submit a copy of the site's contingency plan to the DEP, and after approval, it becomes a condition of any permit issued [RCSA 22a-449(c)-26(c)].</p> <p>41a. Owners and operators of TSD facilities must prepare and submit a single copy of an annual report to DEP by March 1 for the previous calendar year [RCSA 22a-449(c)-27(d)].</p>	<ul style="list-style-type: none"> ● Obtain a copy of the Connecticut permit and verify that it is current. ● Through interviews, ensure that the TSD facility sends a written notice to each generator. ● Obtain a copy of the written notice and verify that the facility has all the permits indicated on the notice. ● Verify that a copy of the contingency plan has been submitted to DEP. As a good management practice, the facility should maintain written notification from DEP of its receipt. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41a. Continued	<ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - calendar year covered by the report; - identification number for all generators from which waste was received during the year; - description and quantity of hazardous waste received, tallied for manifested waste and unmanifested waste (as from small quantity generators); - method of treatment or disposal; and - certification signed by the owner/operator of the facility. 		
41b. Owners and operators of TSD facilities who accept unmanifested wastes must prepare and submit to DEP within 15 days of receiving such waste an unmanifested waste report [RCSA 22a-449(c)-27(e)].	<ul style="list-style-type: none"> ● Determine if the facility accepts unmanifested waste, and, if so, verify that the appropriate reports are sent to DEP. ● Obtain a copy of an unmanifested waste report and verify that it contains the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41b. Continued	<ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - date the unmanifested waste was received; - identification number, name, and address of generator and transporter, if available; - description and quantity of hazardous waste received; - method of treatment or disposal; - certification signed by the owner/operator of the facility; and - a brief explanation of why the waste was unmanifested. 		
AIR EMISSIONS			
2. Connecticut requires a permit to construct prior to any construction or modification of a new stationary source of air pollutants and a permit to operate in order to operate any stationary source (RCSA 22a-174-3).	<ul style="list-style-type: none"> ● Verify that the facility has obtained a permit to construct for any construction of new sources and has a current, valid permit to operate. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>4. All stationary sources must meet specified opacity limits (RCSA 22a-174-18).</p> <p>WATER DISCHARGES</p> <p>1. The State of Connecticut requires permits for the discharge of pollutants from any point source into waters of the State [RCSA 22a-430-4(a)].</p> <p>2. The permit may require monitoring of discharge flow and pollutant mass or concentration [RCSA 22a-430-3(j)].</p> <p>3. The state reference is RCSA 22a-430-3(j)(5).</p> <p>4. The state reference is RCSA 22a-430-3(j)(5).</p> <p>5. The permit may specify that the permittee must maintain records of all information resulting from any monitoring activities and must</p>	<ul style="list-style-type: none"> ● Verify that no air emissions have an opacity greater than 20%, unless the emission is for less than 5 minutes per hour and is below 40 % opacity. ● Examine any state NPDES discharge permits and verify that all the information contained in the permit is still valid. ● Check the Federal checklist for instructions. ● Check the Federal checklist for instructions. ● Check the Federal checklist for instructions. ● Verify that the monitoring records include the following: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>retain these records for a minimum of 5 years [RCSA 22a-430-3(j)].</p>	<ul style="list-style-type: none"> - the date, exact place, and time of sampling; - the dates on which analyses were performed; - who performed the analyses; - the analytical techniques/methods used; - the results of such analyses; and - frequency and duration of noncontinuous discharges. <ul style="list-style-type: none"> ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to DEP in the required discharge monitoring reports. ● Verify that notification was given to DEP of new, different, or increased discharges since the last permit application was submitted. ● If monitoring indicates that any discharge exceeded the permitted levels, verify that the facility notified the DEP within 2 hours, or if discovered outside of 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>5. Continued</p> <p>6. NPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements [RCSA 22a-430-4(1)(3)].</p>	<p>normal business hours, at the start of business on the next day.</p> <ul style="list-style-type: none"> ● Examine the permit for compliance schedules and verify that these schedules are being met (see Federal Checklist for further instructions). 		

APPENDIX C

ILLINOIS CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>16. Illinois requires the use of the state version of the federal Uniform Hazardous Waste Manifest and imposes additional filing requirements (35 Illinois Administrative Code (IAC) 722.120 and 722.123).</p> <p>21. Generators who ship hazardous wastes offsite must submit to Illinois EPA an annual generator report by March 1 for the previous calendar year (35 IAC 722.141).</p>	<ul style="list-style-type: none"> ● Verify that the facility uses the Illinois manifest. ● Verify that the facility sends a copy of each manifest to the Illinois Environmental Protection Agency (EPA) within 2 working days of shipment. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - USEPA generator identification number; - facility name and address; - calendar year covered by the report; - USEPA TSD facility identification number; - TSD facility name and address; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<ul style="list-style-type: none"> - transporter name and USEPA identification number; - description, waste code, handling method, and quantity of each waste shipped; - a description of efforts undertaken in the past year to reduce the volume and toxicity of the waste generated; - a description of the change in volume and toxicity actually achieved in comparison to previous years, where data are available; and - certification signed by the owner/operator of the facility. 		
28. TSD facilities must inform each contributing generator in writing that the facility has all necessary permits and will accept the generator's waste [35 IAC 724.112(b)].	<ul style="list-style-type: none"> ● Through interviews, verify that the TSD facility sends the appropriate notices. ● Obtain a copy of a notice and verify that the facility has all the permits identified in the notice. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>36. TSD facilities must submit a copy of the site's contingency plan to the Illinois EPA for approval and inclusion in the facility's operating permit (35 IAC 724.153).</p> <p>41. Owners or operators of TSD facilities must prepare and submit an annual TSD facility report to the Illinois EPA by March 1 for the previous calendar year (35 IAC 724.175).</p>	<ul style="list-style-type: none"> ● Verify that the contingency plan was submitted to the Illinois EPA. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - USEPA TSD facility identification number; - facility name and address; - calendar year covered by the report; - identification numbers for all generators from which waste was received during the year; - description and quantity of each waste received; - certification signed by the owner/operator of the facility; and - method of treatment, storage, or disposal for each waste. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>AIR EMISSIONS</p> <p>2. Illinois requires a Permit to Construct prior to any construction or modification of any new emissions source or any new air pollution control equipment and a Permit to Operate any emissions source or air pollution control equipment (35 IAC 201.142 et seq.).</p> <p>4. All stationary sources must meet specified opacity limits (35 IAC 212.123).</p> <p>WATER DISCHARGES</p> <p>1. The State of Illinois requires permits for the discharge of pollutants from any point source into waters of the State (35 IAC 309.102).</p> <p>2. The permit may require monitoring of discharge flow and pollutant mass or concentration [35 IAC 309.146(a)].</p>	<ul style="list-style-type: none"> ● Verify that the facility has obtained a Permit to Construct for any construction of new sources and has a current, valid Permit to Operate. ● Verify that no air emissions have an opacity greater than 30%, unless the emission is for less than 8 minutes per hour and is below 60 % opacity. ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● Check the Federal checklist for instructions. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>5. Illinois may impose reporting and recordkeeping requirements as conditions of the permit [35 IAC 309.146(a)].</p> <p>6. Illinois NPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements (35 IAC 309.148).</p> <p>8a. Illinois requires all industrial users who discharge into a POTW to have a Pretreatment Permit unless the POTW has an approved pretreatment program (35 IAC 310.400).</p>	<ul style="list-style-type: none"> ● Verify that the facility complies with any recordkeeping requirements (see Federal checklist for instructions). ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to the Illinois EPA in the required discharge monitoring reports. ● Examine the permit for compliance schedules and verify that these schedules are being satisfied (see Federal Checklist for further instructions). ● Determine if the facility discharges to a POTW that has an approved pretreatment program. Obtain a copy of their pretreatment standards and audit against them. ● If the POTW does not have an approved program, verify that the facility has a Pretreatment Permit. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>8b. Illinois prohibits a facility from using dilution to comply with any pretreatment standard, unless expressly authorized to do so by the applicable standard (35 IAC 310.232).</p>	<ul style="list-style-type: none"> ● Verify that the facility does not dilute its discharge to attain any pretreatment standards. 		

APPENDIX D

MARYLAND CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under Maryland regulation, PCBs are listed as hazardous wastes [Code of Maryland Regulations (COMAR) 10.51.02.17].</p> <p>16. Maryland requires the use of its version of the federal Uniform Hazardous Waste Manifest [COMAR 10.51.03.04(E)] and im-</p>	<ul style="list-style-type: none"> ● Verify that wastes containing PCBs are included in the hazardous waste inventory and are managed as hazardous wastes. ● PCB-containing wastes have been given the following state hazardous waste numbers: <ul style="list-style-type: none"> - MX01 – any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of PCBs at concentrations greater than 50 ppm are listed hazardous wastes; - M001 – wastes containing greater than 500 ppm are acutely hazardous wastes; and - MT01 – wastes containing between 50 and 500 ppm are Maryland Toxic wastes. ● Verify that the site uses the Maryland manifest when shipping hazardous wastes offsite. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>poses additional reporting requirements [COMAR 10.51.03.06(C)].</p> <p>21. A generator who ships hazardous waste offsite must submit an annual report to the MDE by March 1 for the preceding calendar year [COMAR 10.51.03.06(B)].</p>	<ul style="list-style-type: none"> ● Verify that the generator sends a copy of that portion of the manifest describing the characteristics of the waste to the Maryland Department of the Environment (MDE) immediately upon shipment of the waste. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - USEPA generator identification number; - facility name and address; - calendar year covered by the report; - USEPA TSD facility identification number; - TSD facility name and address; - transporter name and USEPA identification number; - description of the waste, EPA waste number, DOT 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<p>hazard class, and quantity of each waste shipped;</p> <ul style="list-style-type: none"> - a description of efforts undertaken in the past year to reduce the volume and toxicity of the waste generated; - a description of the change in volume and toxicity actually achieved in comparison to previous years, where data are available; and - certification signed by the owner/operator of the facility. 		
25. Every hazardous waste transporter must be certified by the MDE [COMAR 10.51.04.01(C)].	<ul style="list-style-type: none"> ● Verify that any transporter used has been certified and that this certification is valid. 		
41. A TSD facility must submit an annual report to the MDE by March 1 for the preceding calendar year and an unmanifested waste report if unmanifested waste is accepted at the facility [COMAR 10.51.05.05(F)].	<ul style="list-style-type: none"> ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - USEPA TSD facility identification number; - facility name and address; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41. Continued	<ul style="list-style-type: none"> - calendar year covered by the report; - identification numbers for all generators from which waste was received during the year; - description and quantity of each waste received; - certification signed by the owner/operator of the facility; and - method of treatment, storage, or disposal for each waste. <p>● Verify that the facility sends an unmanifested waste report to MDE within 15 days of receiving any unmanifested waste and that the report contains the following information:</p> <ul style="list-style-type: none"> - USEPA TSD facility identification number; - facility name and address; - date the unmanifested waste was received; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41. Continued	<ul style="list-style-type: none"> - a description and quantity of the waste received; - method of treatment or disposal; - certification signed by the owner/operator of the facility; and - a brief explanation of why the waste was unmanifested. 		
AIR EMISSIONS			
2. Maryland requires a Permit to Construct prior to any construction or modification of any air emission source (COMAR 10.18.02.02).	<ul style="list-style-type: none"> ● Verify that the facility has obtained a Permit to Construct for any construction of new air emission sources. 		
4. Maryland has established specific opacity standards for each air district (COMAR 10.18.06.02).	<ul style="list-style-type: none"> ● Verify that the following opacity standards are met: <ul style="list-style-type: none"> - emissions of less than 20% opacity and no visible emission beyond the property line for Areas I (Allegany, Garrett, and Washington Counties), II (Frederick Co.), V (Calvert, Charles, and St. Mary's Counties), and VI (Caroline, Cecil, 		

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<p>4. Continued</p> <p>9. A business entity or public unit may not engage in any asbestos projects unless it is licensed by the MDE (COMAR 10.18.23.04).</p> <p>10. The owner or operator of a demolition or renovation operation must notify the Maryland Air Management Administration as soon as possible before demolition or renovation begins (COMAR 10.18.23.03).</p> <p>13. Maryland has additional packaging, labeling, and storage requirements for asbestos-containing wastes (COMAR 10.18.23.08).</p>	<p>Dorchester, Kent, Queen Annes, Somerset, Talbot, Wicomico, and Worcester Counties); and</p> <ul style="list-style-type: none"> - no visible emissions for Areas III (Anne Arundel, Baltimore, Carroll, Harford and Howard Counties) and IV (Montgomery and Prince George's Counties). ● Through interviews or record reviews, verify that all asbestos contractors are licensed by the state. ● Verify that notification is sent as soon as possible. ● Verify that all asbestos-containing wastes are placed in plastic bags of at least 6 mils in thickness and that the bags are sealed. ● Verify that all bags are labeled with the following: 		

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13. Continued	<ul style="list-style-type: none"> - the asbestos removers license number; and - the date the bag was sealed. <ul style="list-style-type: none"> ● Verify that asbestos is stored according to the following requirements: <ul style="list-style-type: none"> - the person is licensed to store asbestos-containing wastes; - less than 20 cubic yards are stored; - the area is secure; - the asbestos is enclosed in rigid containers; and - the waste is stored less than 90 days. ● If the activity is subject to the federal asbestos NESHAPs, verify that all asbestos-containing wastes are removed within 24 hours of completing the asbestos renovation, demolition, or encapsulation activity. 		

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<p>WATER DISCHARGES</p> <p>1. The State of Maryland requires permits for the discharge of pollutants from any point source into waters of the State (COMAR 10.50.01.08).</p> <p>2. The permit may require monitoring of discharge flow and pollutant mass or concentration and may specify requirements for the installation, use, and maintenance of monitoring equipment and methods [COMAR 10.50.01.08(I)(1)].</p> <p>5. Maryland may impose reporting and recordkeeping requirements as conditions of the permit [COMAR 10.50.01.08(I)(2)].</p>	<ul style="list-style-type: none"> ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● Determine if monitoring requirements are specified in the permit. Verify that the facility complies with these requirements (see federal checklist for instructions). ● Check the permit for requirements and audit against them. Monitoring records must be retained for at least 5 years. ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to the MDE in the required discharge monitoring reports. 		

APPENDIX E

MASSACHUSETTS CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under Massachusetts regulations, PCBs and waste oil are regulated with hazardous wastes [310 Code of Massachusetts Regulation (CMR) 30.130].</p> <p>16. Massachusetts requires the use of its version of the federal Uniform Hazardous Waste Manifest (310 CMR 30.312).</p>	<ul style="list-style-type: none"> ● Determine if the facility generates wastes that contain PCBs in concentrations equal to or greater than 50 ppm. Verify that these wastes are managed as hazardous wastes (M002). ● Determine if the facility generates any waste oils, such as waste crude oil and fuel oil, other than those petroleum-based oils that contain no aromatic hydrocarbons and are transparent, colorless, odorless, and tasteless when cold. These "white oils" are exempt from regulation. All other waste oils have hazardous waste number M001. ● Verify that the facility uses the Massachusetts manifest for all of-site shipments of hazardous waste. ● Verify that the generator sends a copy of the manifest to the Massachusetts Department of Environmental Quality Engineering (DEQE) for instate TSD 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
16. Continued	<p>facilities or to the state agency of the state in which any other TSD facility is located within 10 days of shipping the waste.</p>		
21. Generators who ship hazardous wastes offsite must submit to the DEQE an annual generator report (310 CMR 30.332).	<ul style="list-style-type: none"> ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA generator identification number; - facility name and address; - calendar year covered by the report; - EPA TSD facility identification number; - TSD facility name and address; - EPA transporter identification number and name; - description of the waste, EPA waste number, DOT hazard class, and quantity of each waste shipped; - a description of efforts undertaken in the past year to 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<p>reduce the volume and toxicity of waste generated;</p> <ul style="list-style-type: none"> - a description of the change in volume and toxicity actually achieved in comparison to previous years, where data are available; and - certification signed by the owner/operator of the facility. 		
24. Massachusetts imposes specific requirements on small quantity generators (310 CMR 30.351).	<ul style="list-style-type: none"> ● If more than 400 kg of wastes are accumulated, verify that these wastes are stored for less than 180 days or that the generator has a license from DEQE. ● Inspect the storage area and verify that: <ul style="list-style-type: none"> - containers are maintained in good condition; - containers hold compatible wastes and the lining of the containers is compatible with the waste stored within; - containers are labeled as Hazardous Waste and that the label indicates the identity of the waste, type of 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
24. Continued	<p>hazard, and the date the accumulation period began;</p> <ul style="list-style-type: none"> - containers are inspected weekly; - there is sufficient aisle space between rows of containers; - the floor of the containment area is impervious and free of cracks; - the building has an internal alarm and a communication device to summons aid from a fire department or other emergency service; - the building contains fire, spill control, and decontamination equipment; - an up-to-date list of the name and number of an emergency coordinator, the location of emergency equipment, the fire department number, and evacuation routes is available by each phone; - the building is supplied with water at sufficient force and volume for firefighting; and - exits are clearly marked. 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
24. Continued	<ul style="list-style-type: none"> ● Verify that one employee is available or on-call to respond to any emergency. ● Through interviews, determine if employees are trained so that they know how to perform their duties so that waste handling practices and emergency procedures are performed properly. ● Verify that a reasonable attempt has been made to familiarize the local fire and police departments and hospitals of the types of waste handled, the location of wastes, their hazards, and entrances and exits to the building. 		
25. Every hazardous waste transporter must obtain a license from the DEQE (310 CMR 30.402).	<ul style="list-style-type: none"> ● Verify that any transporter used has a valid DEQE transporter license. 		
28. TSD facilities must inform each contributing generator in writing that the facility has all appropriate permits and will accept the generator's waste [310 CMR 30.512(b)].	<ul style="list-style-type: none"> ● Obtain a copy of the written notice and verify that the facility has all the permits indicated on the notice. 		
41a. Owners or operators of TSD facilities who do not receive hazardous wastes from any offsite	<ul style="list-style-type: none"> ● Check last year's annual report for completeness and timely submission. Verify that each report 		

Installation:	Compliance Category:	Auditor(s):	Date:
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<p>source must submit to DEQE an annual report by March 1 of each year to cover the previous calendar year (310 CMR 30.544).</p> <p>41b. Owners or operators of TSD facilities who receive hazardous wastes from any offsite source must submit monthly operating reports to DEQE (310 CMR 30.545).</p>	<p>contains the following information:</p> <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - calendar year covered by the report; - description and quantity of each waste received; - method of treatment, storage, or disposal for each waste; - certification signed by the owner/operator of the facility; and - a description of efforts taken and changes actually achieved in volume and toxicity during treatment. <p>● Verify that the monthly reports are sent to DEQE and contain the following information:</p> <ul style="list-style-type: none"> - total quantity of each type of waste received at the facility; 		

Installation:	Compliance Category:	Auditor(s):	Date:
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41b. Continued	<ul style="list-style-type: none"> - quantity of each type of waste disposed of at the facility and the disposal method used; - quantity of each type of waste transferred to another TSD facility and that facility's name and address; - quantity and description of any non-hazardous components separated from the wastes and the method and location of their disposal; and - quantities and types of wastes in storage on the last day of the month. 		
AIR EMISSIONS			
2. Massachusetts requires persons to obtain approval prior to any construction or modification of a new stationary source of air pollutants and to operate any stationary source in accordance with such approval [310 CMR 7.02(2)(a)].	<ul style="list-style-type: none"> ● Verify that the facility has obtained approval to construct any new sources and operates existing sources in compliance with the approval. 		

Installation:	Compliance Category:	Auditor(s):	Date:
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<p>4. Massachusetts prohibits fugitive dust emissions that would contribute to a condition of air pollution [310 CMR 7.09(2)].</p> <p>10. The owner or operator of a demolition or renovation operation must notify the DEQE at least 20 days before any demolition or renovation begins [310 CMR 7.15(1)(b)].</p> <p>11 and 12. Certain measures must be taken to limit asbestos emissions during demolition or renovation [310 CMR 7.15(1)(c)].</p> <p>13. Each owner or operator of a demolition or renovation operation must meet certain asbestos disposal requirements [310 CMR 7.15(1)(e)].</p> <p>WATER DISCHARGES</p> <p>1. The State of Massachusetts requires permits for the discharge of pollutants from any point source into waters of the Commonwealth, including storm water discharges that may be contaminated by contact with toxic pollutants or hazard-</p>	<ul style="list-style-type: none"> ● Verify that the facility has taken reasonable precautions to limit fugitive dust emissions. ● Verify that the appropriate notification is sent (see federal checklist for instructions). ● See federal checklist for instructions. ● Verify that asbestos waste is placed in leak-tight containers, labeled as asbestos waste, and disposed of in an approved disposal site. ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>ous wastes (310 CMR 3.03 and 3.04).</p> <p>2. The permit may impose specific monitoring requirements [310 CMR 3.10(9)].</p> <p>5. The permit may also require the facility to submit discharge monitoring reports to the DEQE at a schedule of at least once per year and to retain these records for a minimum of 3 years [310 CMR 3.10(9)(a)].</p>	<ul style="list-style-type: none"> ● Check the Federal checklist for instructions. ● Verify that the monitoring records include the following: <ul style="list-style-type: none"> - the date, exact place, and time of sampling; - the dates on which analyses were performed; - who performed the analyses; - the analytical techniques/methods used; - the results of such analyses; and - frequency and duration of noncontinuous discharges. ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to DEQE with the required report. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>6. NPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements and contain reporting requirements about the status of compliance [310 CMR 3.10(20)].</p>	<ul style="list-style-type: none"> ● If so required in the permit, verify that the facility submits compliance schedule reports within 14 days of each specific compliance date noted in the permit. ● If monitoring indicates that any discharge exceeded the permitted levels or the facility anticipate any noncompliance, verify that the facility notified the DEQE within 24 hours. 		

APPENDIX F

MICHIGAN CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under Michigan regulations, additional wastes are listed as hazardous wastes [Michigan Administrative Code Rule (R) 299.9218 et seq.).</p>	<ul style="list-style-type: none"> ● Verify that wastes are treated as EP toxic wastes if they exhibit the following extract concentrations: <ul style="list-style-type: none"> - Copper – 100 milligrams/liter (# 001D); - Zinc – 500 milligrams/liter (# 003D). ● Determine if the facility generates any severely toxic wastes, which are wastes that contain 1 ppm of more of any of the following chemicals: <ul style="list-style-type: none"> - Aflatoxin (001S); - 2,3,7,8-tetrachlorodibenzo-p-dioxin (002S); - 1,2,3,7,8-pentachlorodibenzo-p-dioxin (003S); - 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin (004S); - 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin (005S); 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. Continued</p> <p>16. Michigan requires the use of the state version of the federal Uniform Hazardous Waste Manifest (R 299.9304).</p> <p>24. Michigan imposes additional requirements on small quantity generators (R 299.9304).</p> <p>25. Every hazardous waste transporter who hauls waste within Michigan must obtain a Transporter Busi-</p>	<ul style="list-style-type: none"> - 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin (006S); or - 2,3,7,8-tetrachlorodibenzo furan (007S). ● Verify that the facility uses the Michigan manifest for all offsite shipments of hazardous waste. ● If the facility is a small quantity generator, verify that records of the waste analyses are retained for 3 years. ● If the facility generates liquid wastes, verify that any offsite shipments of that waste are manifested and that the transporter used is licensed. ● Persons who generate less than 100 kg/month of hazardous wastes in a solid form can dispose of this waste at either a hazardous waste or solid waste landfill. ● Verify that any transporter used has a valid DNR transporter license. 		

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<p>ness License from the DNR (R 229.9403).</p> <p>41. Owners and operators of TSD facilities who accept unmanifested wastes must prepare and submit to DNR within 15 days of receiving such waste an unmanifested waste report [R 229.9610(2)].</p>	<ul style="list-style-type: none"> ● Determine if the facility accepts unmanifested waste, and, if so, verify that the appropriate reports are sent to DNR. ● Obtain a copy of an unmanifested waste report and verify that it contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - date the unmanifested waste was received; - identification number, name, and address of generator and transporter, if available; - description and quantity of hazardous waste received; - method of treatment or disposal; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>41. Continued</p> <p>AIR EMISSIONS</p> <p>2. Michigan requires a permit to install, construct, reconstruct, relocate, or alter any process, fuel or refuse-burning equipment, or air pollution control equipment and a permit to operate such air emissions sources (R 336.1201 and 336.1208).</p> <p>4a. All stationary sources must meet specified opacity limits (R 336.1301).</p> <p>4b. Fugitive dust emissions must have an opacity of less than 5% at the zenith at a point beyond the property line of the emission source (R 336.1373).</p>	<ul style="list-style-type: none"> - certification signed by the owner/operator of the facility; and - a brief explanation of why the waste was unmanifested. <ul style="list-style-type: none"> ● Verify that the facility has obtained a Permit to Construct for any construction of new sources and has a current, valid Permit to Operate. ● Verify that no discharge (except uncombined water vapor) from a process or process equipment to outer air has an 6-minute average opacity greater than 20%, unless the emission is for less than 6 minutes per hour and is equal to or below 27% opacity. ● Verify that the facility takes reasonable measures to prevent fugitive dust emissions from exceeding the 5% opacity limit. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>WATER DISCHARGES</p> <p>1. Michigan requires a permit for the discharge of pollutants from any point source into the surface or groundwaters of the State (R 323.2106).</p> <p>2. The permit may require monitoring of discharges and approval of the installation, use, and maintenance of monitoring equipment or methods to be employed (R 323.2154).</p> <p>5. The permit may also require the facility to submit and maintain records of all information resulting from any monitoring activities for 3 years (R 323.2155).</p>	<ul style="list-style-type: none"> ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● If so required in the permit, evaluate the compliance of the facility with monitoring requirements (see federal checklist for instructions) and verify that approval for monitoring equipment and methods has been obtained. ● Verify that any required monitoring records include the following: <ul style="list-style-type: none"> - the date, exact place, and time of sampling; - the dates on which analyses were performed; - who performed the analyses; - the analytical techniques/methods used; - the results of such analyses; and 		

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<p>5. Continued</p> <p>6. NPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements (R 323.2145).</p>	<ul style="list-style-type: none"> - frequency and duration of noncontinuous discharges. ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to DNR in the required discharge monitoring reports. ● Examine the permit for compliance schedules and verify that these schedules are being satisfied (see Federal Checklist for further instructions). ● Verify that the facility sent to DNR within 14 days of any specified compliance date a written notice of the facility's compliance or noncompliance with the requirements of the permit. 		

APPENDIX G

MISSOURI CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Generators who generate more than 10 tons of hazardous waste per year must pay to the State of Missouri a fee equal to the product of \$1 per ton and the tonnage of hazardous waste for the Hazardous Waste Fund [10 Code of State Regulations (CSR) 25-5.020].</p> <p>2a. Generators producing more than 100 kg/mo of hazardous waste or accumulating more than 100 kg at any time must register with the Missouri Department of Natural Resources (MDNR) (10 CSR 25-5.262).</p> <p>2b. Persons who generate 220 lbs/mo of waste oil or mixtures of waste oil and ignitable wastes or who accumulate that quantity at any one time must register with the MDNR (10 CSR 25-11.010).</p>	<ul style="list-style-type: none"> ● Verify that the facility is submitting their fee to the State of Missouri based on the amount of hazardous waste generated during the 12-month period ending June 30th of the previous year. The fee is not to exceed \$10,000. ● Verify that the combined EPA Notification/Missouri Registration form (EPA 8700-12/MO-HWG-1) has been submitted if the facility produces or accumulates these amounts. ● Determine if waste oil or mixtures of waste oil and ignitable wastes are being generated or accumulated in these amounts. <ul style="list-style-type: none"> - Waste oil is defined as "used petroleum-based lubricating, transmission, transformer, hydraulic, or cutting oils, containing 10% or more oil." 		

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<p>2b. Continued</p> <p>15a. Generators must be serviced by transporters who are licensed by MDNR and must maintain contracts for the collection and disposal or recycle of waste oil. Waste oil must be sent to either a permitted TSD facility or a certified recycling facility (10 CSR 11.010).</p> <p>15b. Generators must pay an annual fee of \$25 per ton on all hazardous waste discharged, deposited, dumped, or placed into or on the soil, and an annual fee of \$2 per ton on all hazardous waste transported off-site (10 CSR 25-5.020).</p>	<ul style="list-style-type: none"> - The ignitable wastes in mixtures with waste oil must have a heating value greater than 8,000 BTUs per pound and cannot be listed hazardous wastes. ● Verify that the facility is registered with the MDNR if the quantity limitations are exceeded. ● Verify the following: <ul style="list-style-type: none"> - any transporter used for waste oil shipments is licensed by MDNR, - any TSD facility to which waste oil is sent is permitted with MDNR, and - any recycling facility used for waste oil recycling is certified. ● Verify that the appropriate fees are paid to the State of Missouri and that the tonnage used to calculate the fee agrees with the tonnage indicated on the hazardous waste manifests for that year's off site shipments. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>16. Missouri requires the use of its version of the federal Uniform Hazardous Waste Manifest unless the waste is being shipped out-of-state, in which case the form designated by the receiving state should be used (10 CSR 25-5.262).</p>	<ul style="list-style-type: none"> ● Verify that the proper state manifests (MO-HWG-10) have been used for in-state shipments. Check manifests for the following items: <ul style="list-style-type: none"> - manifest document number; - name, address, telephone number, and EPA ID number of the site, transporter, TSD facility, and alternate TSD facility (if any); - waste information (shipping description, hazard class, quantity, and units); - emergency information (immediate response information, special handling instructions, phone number); - certification which states: "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable regulations of DOT and EPA"; 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
16. Continued	<ul style="list-style-type: none"> - unless exempt by statute or regulation, certification that the facility has in place a program to minimize the volume and toxicity of waste to the extent economically practical; and - the hand written signature of the initial transporter and date of acceptance of manifests. 		
21. Generators who ship hazardous wastes offsite must submit to the MDNR within 45 days after the end of each calendar quarter a summary manifest report.	<ul style="list-style-type: none"> ● Check the last four quarterly reports for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA generator identification number; - facility name and address; - calendar quarter covered by report; - EPA TSDF identification number; - TSDF name and address; - description, waste code, handling method, and quantity of each waste shipped; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>21. Continued</p> <p>25. Every hazardous waste transporter must obtain a transporter license (MO Form 780-0644) and submit and obtain approval of insurance coverage (10 CSR 25-6.263).</p> <p>28. Owners and operators of hazardous wastes TSD facilities in Missouri must have a permit from the MDNR in order to operate the facility (10 CSR 25-7.264).</p> <p>41. Owners or operators of TSD facilities must prepare and submit within 45 days after the end of each calendar quarter a report to the MDNR on all hazardous waste received during the previous quarter [10 CSR 25-7.264(1)(E)].</p>	<ul style="list-style-type: none"> - description of efforts undertaken during the year to reduce the volume and toxicity of waste generated; - description of changes in volume and toxicity of waste actually achieved during the treatment; and - certification signed by owner or operator of the facility. <ul style="list-style-type: none"> ● Verify that any transporter used has a MDNR Hazardous Waste Transporter License Certificate. ● Verify that the facility has a MDNR permit and review the permit for any special operating/reporting requirements. ● Check the last four quarterly reports for completeness and timely submission. Verify that each report contains the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
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41. Continued	<ul style="list-style-type: none"> - EPA TSDF identification number; - facility name and address; - calendar quarter covered by report; - description and quantity of each waste received; - certification signed by owner or operator of the facility; - method of treatment, storage, or disposal for each waste; - most recent closure cost estimate; and - off-site facilities must also report EPA identification number for each hazardous waste generator from which waste was received. 		
PCB MANAGEMENT			
25. Shipments of any waste chemical substance that is known or assumed to contain equal to or greater than 50 ppm PCBs must be accompanied by a hazardous waste	<ul style="list-style-type: none"> ● Verify that any shipment of PCB Materials to a Missouri PCB facility or a facility in a state that does not regulate PCBs is accom- 		

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<p>manifest [10 CSR 25-13.010(3)(B)].</p> <p>AIR EMISSIONS</p> <p>4a. All existing stationary sources must meet specified opacity levels (10 CSR 10-5.090).</p> <p>4b. No person may cause or permit the handling, transporting, or storage of any material in a manner that allows fugitive particulate matter to</p>	<p>panied by EPA Form 8700-22/MDNR-HWG-10.</p> <ul style="list-style-type: none"> ● Verify that any shipment of PCB Materials to a facility located in a state that regulates PCBs is accompanied by that state's manifest, if it is required by that state. ● Verify that an exception report was filed with MDNR within 45 days of the date the waste was accepted by the initial transporter for any PCB Materials shipments from which a copy of the completed manifest was not received by that time. ● Verify that no air emissions have an opacity greater than 20%, unless the emission is for less than 6 minutes per hour and is below 40% opacity. ● Verify that the facility takes reasonable precautions to prevent fugitive dust emissions. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>become airborne in such quantities or concentration that it remains visible beyond the property boundary and it results in 1 complaint (10 CSR 10.5100).</p> <p>WATER DISCHARGES</p> <p>1. Missouri requires permits for point-source discharges into waters of the State [10 CSR 20-6.010].</p>	<ul style="list-style-type: none"> ● Examine any SPDES permit. Verify that the information contained in the permit is still valid. Check for the following: <ul style="list-style-type: none"> - name and mailing address of permittee; - expiration date; - discharge is as described in permit; - location of discharge points are properly described; and - the name and location of the receiving water is correct. ● Verify that the permit application was signed by an individual having overall responsibility for the environmental matters at the facility. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>2. SPDES permits require that facility to monitor discharges for all permitted parameters [10 CSR 20-6.101(8)].</p> <p>5. Records must be retained in accordance with the requirements of the permit [10 CSR 20-6.101(8)].</p> <p>8. Facilities discharging industrial wastewater into POTWs must meet certain pretreatment requirements (10 CSR 20-6.100).</p>	<ul style="list-style-type: none"> ● Verify that any monitoring being performed is done in accordance with the conditions specified in the permit. ● Verify that the recordkeeping requirements specified in the permit are being met. ● Determine whether the receiving POTW has established pretreatment standards for its users. ● Verify that the facility meets any pretreatment standards. ● Verify that pollutants are not discharged to the POTW that would: <ul style="list-style-type: none"> - create a fire or explosion hazard anywhere in the POTW; - cause corrosive structural damage to the POTW; - obstruct flow to the POTW, as caused by large quantities of solid or viscous materials; 		

Installation:		Compliance Category:		Auditor(s):		Date:	
REGULATORY REQUIREMENTS		INSTRUCTIONS TO AUDITOR		AUDITOR COMMENTS		FINDINGS	
8. Continued		<ul style="list-style-type: none"> - cause interference with the treatment processes or sludge use or disposal; or - cause the POTW to violate any requirements of its NPDES permit. 					

APPENDIX H

NEW JERSEY CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under New Jersey regulations, waste oil has been listed as a hazardous waste [New Jersey Administrative Code (NJAC) 7:26-8.13(b)].</p>	<ul style="list-style-type: none"> ● Determine if the facility generates any of the following wastes considered toxic: <ul style="list-style-type: none"> - Waste auto crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages (hazardous waste # X721); - Waste oil and bottom sludges generated from tank clean-outs from residential/commercial fuel oil tanks (X722); - oil spill cleanup residues which are contaminated beyond saturation or for which the generator fails to demonstrate that the spilled material was not one of the listed oils (X725); - waste metalworking oil, waste turbine and diesel lubricating oils, and waste quenching oils (X726); and - waste oils from the draining, cleaning, or disposal of 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>1. Continued</p> <p>16a. New Jersey has a state version of the federal Uniform Hazardous Waste Manifest that can be used. Generators and owners/operators of TSD facilities must send copies of all manifests to the New Jersey Department of Environmental Protection (NJDEP) (NJAC 7:26-7.3).</p> <p>16b. A generator must paint, ink, or label the appropriate manifest number on all hazardous waste containers intended for shipment (NJAC 7:26-7.2).</p> <p>17. Generators in New Jersey must not ship acute hazardous waste (H waste) or toxic waste (T waste) for final disposal in a landfill or land treatment facility [NJAC 7:26-7.4(a)(10)].</p> <p>21. Generator's who ship hazardous wastes offsite must submit to NJDEP an annual report by March 1 for the preceding calendar year [NJAC 7:26-7.4(f)].</p>	<p>electric transformers (X727).</p> <ul style="list-style-type: none"> ● Verify that copies of all manifests have been sent to the NJDEP by the next business day from when the shipment arrived. ● Verify that all shipped waste containers have the manifest number painted or otherwise marked upon them. ● Verify that these wastes are not sent for land disposal. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<ul style="list-style-type: none"> - EPA generator identification number; - facility name and address; - calendar year covered by the report; - identification number of the TSD facility - TSD facility name and address; - transporter EPA identification number, name, and address; - description and quantity of hazardous waste shipped; and - certification signed by the owner/operator of the facility. 		
25. Every hazardous waste transporter must obtain a license from NJDEP and update it prior to May 1 of each calendar year (NJAC 7:26-7.5).	<ul style="list-style-type: none"> ● Verify that any transporter used is licensed by the state. 		
28. TSD facilities must inform each contributing generator in writing that the facility has all the necessary	<ul style="list-style-type: none"> ● Through interviews, ensure that the TSD facility sends a written notice to each generator. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>permits and will accept the generator's waste (NJAC 7:26-9.4).</p> <p>31. New Jersey requires that the inspection schedule be submitted as part of the TSD facility permit application (NJAC 7:26-9.4(f)).</p> <p>35. New Jersey imposes additional requirements for containers holding hazardous wastes to minimize hazards [NJAC 7:26-9.4(d) and (f)].</p> <p>41. Owners and operators of TSD facilities must submit 2 copies of an annual report by March 1 for the preceding calendar year [NJAC 7:26-9.4(j)].</p>	<ul style="list-style-type: none"> ● Obtain a copy of the written notice and verify that the facility has all the permits indicated on the notice. ● Verify that the inspection schedule was submitted. ● Inspect the storage areas and verify that containers are segregated and stored by waste type. ● Verify through interviews that containers are inspected daily rather than weekly as is required by federal regulations. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41. Continued	<ul style="list-style-type: none"> - calendar year covered by the report; - identification number for all generators from which waste was received during the year; - description and quantity of hazardous waste received, tallied for manifested waste and unmanifested waste (as from small quantity generators); - method of treatment or disposal; and - certification signed by the owner/operator of the facility. 		
AIR EMISSIONS			
2. New Jersey prohibits any person from constructing, installing, altering, or using any new equipment or air pollution control apparatus without first having obtained a Permit to Construct and a Permit to Operate (NJAC 7:27-8.3).	<ul style="list-style-type: none"> ● Verify that the facility has obtained a Permit to Construct for any construction of new sources and has a current, valid Permit to Operate. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>4. All existing stationary sources must meet specified opacity limits (NJAC 7:27-8.3).</p> <p>WATER DISCHARGES</p> <p>1. New Jersey requires permits for point source discharges into waters of the State (NJAC 7:14A-1.2).</p> <p>2. SPDES permits may require the facility to monitor discharges for all permitted parameters [NJAC 7:14A-2.5(a)(12)].</p> <p>5. New Jersey requires facilities to submit discharge monitoring reports at a frequency to be specified in the permit [NJAC 7:14A-2.5(a)(12)].</p>	<ul style="list-style-type: none"> ● Verify that no emissions from the combustion of fuel to outside air have an opacity greater than 20%, unless the emission is for less than 3 minutes per 30 minute period. ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● The state permit should indicate that the facility is prohibited from using dilution of its effluent to meet any concentration standard. ● Determine if monitoring is required in the permit (Check the federal checklist for instructions). ● Verify that the monitoring records include the following: <ul style="list-style-type: none"> - the date, exact place, and time of sampling; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>5. Continued</p>	<ul style="list-style-type: none"> - the dates on which analyses were performed; - who performed the analyses; - the analytical techniques/methods used; - the results of such analyses; and - frequency and duration of noncontinuous discharges. <ul style="list-style-type: none"> ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to NJDEP in the required discharge monitoring reports. 		
<p>6. NPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements [NJAC 7:14A-2.5(a)(14)].</p>	<ul style="list-style-type: none"> ● Examine the permit for compliance schedules and verify that the facility submits a compliance report no later than 14 days following each scheduled date. ● Obtain a copy of the compliance report and verify that it contains the following information: 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
6. Continued	<ul style="list-style-type: none"> - any noncompliance which may endanger health or the environment; - a description of the discharge; - steps being taken to determine the cause of any non-compliance; - steps taken to reduce and eliminate the noncomplying discharge; - period of noncompliance, from the first date and time to the actual date and time corrected or anticipated date for correcting the non-compliance; - cause, if known; and - steps to prevent the reoccurrence of the problem. 		
8. New Jersey requires each industrial user who discharges wastewater to a POTW to apply for and obtain a significant industrial user (SIU) permit for those discharges (NJAC 7:14-13).	<ul style="list-style-type: none"> ● Determine if the facility discharges to a POTW and verify that it has obtained an SIU permit or is not classified as a "significant" user. 		

APPENDIX I

NEW MEXICO CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. The New Mexico Health and Environment Department imposes no more stringent or additional requirements.</p>			
<p>AIR EMISSIONS</p> <p>2. New Mexico requires a permit to construct or modify any source of one or more regulated air contaminants for which National Ambient Air Quality Standards exist [Environmental Improvement Division Rules Part II, A(1)(a)].</p>	<ul style="list-style-type: none"> ● Verify that the facility has obtained a Permit to Construct for any construction of new sources. 		
<p>WATER DISCHARGES</p> <p>1. New Mexico does not have an approved NPDES program. The State does prohibit any person from discharging effluent or leachate so that it may move directly or indirectly into groundwater unless that discharge is approved (Water Quality Control Commission Regulations 3-104).</p>	<ul style="list-style-type: none"> ● Determine if the facility discharges any wastewater that could move directly or indirectly to groundwater. ● Verify that the facility has an approved discharge plan or a written exemption form the New Mexico Health and Environment Department. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
1. Continued	<ul style="list-style-type: none"> ● Review the plan and verify that any prescribed monitoring and reporting requirements are being fulfilled. 		

APPENDIX J

NEW YORK CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under New York regulations, all wastes containing 50 ppm or greater of PCBs are listed hazardous wastes and must be managed as hazardous wastes [6 New York Code of Rules and Regulations (NYCRR) 371.4(e)].</p> <p>2. Facilities must notify the New York Department of Environmental Conservation (NY DEC) of their hazardous waste activities [6 NYCRR 372.2(a)].</p>	<ul style="list-style-type: none"> ● Verify that the master list of types and quantities of hazardous wastes generated, treated, and disposed of includes any wastes containing 50 ppm or more of PCBs. ● Obtain a copy of the notification of hazardous waste activity sent to the NY DEC to verify that this notification was sent. ● Compare EPA ID numbers of wastes on the EPA Form 8700-12 with the wastes listed on the Master List (Item 1). Record any inconsistencies. ● Examine documentation from EPA for the facility's generator identification numbers. ● Confirm that correct ID number is used on all appropriate documents (i.e., manifests). 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>16. New York has decided to require the use of its individualized version of the federal Uniform Hazardous Waste Manifest, unless the State to which the shipment is sent supplies the manifest and requires its use [6 NYCRR 372.2(b)].</p>	<ul style="list-style-type: none"> ● Check manifests for the following items: <ul style="list-style-type: none"> - manifest document number; - name, address, telephone number, and EPA ID number of the site, transporter, TSD facility, and alternate TSD facility (if any); - waste information (shipping description, hazard class, quantity, and units; - emergency information (immediate response information, special handling instructions, phone number); - certification which states: "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable regulations of DOT and EPA; - unless exempt by statute or regulation, certification that the facility has in place a program to minimize the volume and toxicity of waste to the 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
16. Continued	<p>extent economically practical;</p> <ul style="list-style-type: none"> - the hand written signature of the initial transporter and date of acceptance of manifests. 		
21. Generators who ship hazardous waste offsite must submit two copies of the annual report (Generator Annual Report, NY Form 47-15-17) to the NY DEC no later than March 1 for the preceding calendar year [6 NYCRR 372.2(c)(2)].	<ul style="list-style-type: none"> ● Exception reports in NY must be filed with the NY DEC if the generator has not received a signed copy of the manifest within 20 days (6 NYCRR 372.2(c)). Federal regulations allow 45 days from the date of shipment. ● Check annual report for completeness and timely submission. ● Verify that the report contains the following information: <ul style="list-style-type: none"> - EPA generator identification number; - facility name and address; - calendar year covered by report; - EPA treatment, storage, and disposal facility identification number; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<ul style="list-style-type: none"> - treatment, storage, and disposal facility name and address; - description, waste code, handling method, and quantity of each waste shipped; and - certification signed by the owner or operator of the facility; 		
41. Owners or operators of TSD facilities must prepare and submit two copies of an annual report to the NY DEC by March 1 of each year to cover facility activities for the previous calendar year [6 NYCRR 373-2.5(e)].	<ul style="list-style-type: none"> ● Obtain a copy of the annual report. ● Verify that the annual reports contain the following information: <ul style="list-style-type: none"> - EPA Identification Number; - facility name and address; - calendar year covered by report; - description and quantity of each waste received; - method of treatment, storage, or disposal for each waste; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41. Continued	<ul style="list-style-type: none"> - certification signed by owner or operator of the facility; and - EPA identification number for each hazardous waste generator from which waste was received. 		
AIR EMISSIONS			
2. A certificate of operation is required to operate an existing air contamination source and a permit is required to commence construction of a new air contamination source or to modify an existing source (6 NYCRR 201.2).	<ul style="list-style-type: none"> ● Verify that each air contaminant source has a certificate of operation or a Permit to Construct. ● Examine permits and certificates for effective dates and special conditions or requirements. ● Compare permitted sources with those listed on the emissions inventory. 		
4. Under New York regulations, no person shall cause or allow emissions having an average opacity during six consecutive minutes of 20% or greater from any process emission source (6 NYCRR 212.5).	<ul style="list-style-type: none"> ● Inspect the facility and determine, using a Ringelman chart, that the opacity meets the 20% limit (excluding uncombined water vapor). 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>WATER DISCHARGES</p> <ol style="list-style-type: none"> 1. New York requires permits for the discharge of pollutants from any point source into waters of the State (6 NYCRR 751.1). 2. The permit may require monitoring of discharge flow and pollutant mass or concentration (6 NYCRR 756.1). 5. The permit may also impose reporting and recordkeeping requirements (6 NYCRR 756.2). 	<ul style="list-style-type: none"> ● Examine any SPDES discharge permit and verify that all the information contained in the permit is still valid. ● Check the federal checklist for instructions. ● Verify that any required monitoring reports include the following information: <ul style="list-style-type: none"> - the date, exact place, and time of sampling; - the dates on which analyses were performed; - who performed the analyses; - the analytical techniques/methods used; and - the results of such analyses. ● Verify that notification was given to NY DEC of new, different, or increased discharges since last 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>5. Continued</p> <p>6. SPDES permits may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements (6 NYCRR 754.3).</p> <p>8. New York exempts discharges to publicly-owned treatment works (POTW) from permit requirements as long as certain requirements are satisfied (6 NYCRR 751.3).</p>	<p>permit application was submitted.</p> <ul style="list-style-type: none"> ● Examine the permit for compliance schedules and verify that these schedules are being satisfied (see federal Checklist for further instructions). ● Verify that the facility notified the NY DEC in advance of introducing pollutants into the POTW from a new source and of changing the volume or characteristics of the pollutants being introduced. 		

APPENDIX K

OREGON CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>1. Under Oregon regulations, pesticides or pesticide manufacturing residues are toxic hazardous wastes if a representative sample of the waste exhibits a 96-hour aquatic LC50 equal to or less than 250 milligrams/liter [Oregon Administrative Rules(OAR) 340-101-035(5)(a)].</p> <p>21. Any person who generates more than 1 kg of acutely hazardous waste, a total of 100 kg per month of hazardous wastes or who accumulates onsite at any time more than 1,000 kg of hazardous waste must submit to the Oregon Department of Environmental Quality (DEQ) quarterly generator reports within 45 days after the end of the calendar quarter (OAR 340-102-041).</p>	<ul style="list-style-type: none"> ● Determine if the facility generates such pesticide wastes or residues and manages them as hazardous wastes. ● Check last year's quarterly reports for completeness and timely submission. Verify that each report contains: <ul style="list-style-type: none"> - copies of the latest quarter's Uniform Hazardous Waste Manifests and a listing of all hazardous wastes that were sent offsite without a permit; or - a statement that no hazardous wastes were generated; and - certification signed by the owner/operator of the facility. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>41a. Owners or operators of treatment and storage facilities must submit quarterly reports to the DEQ within 45 days after the end of each calendar quarter (OAR 340-104-075).</p>	<ul style="list-style-type: none"> ● Check last year's quarterly reports for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - calendar quarter covered by the report; - description and quantity of each waste received; - certification signed by the owner/operator of the facility; and - method of treatment or storage. 		
<p>41b. Owners or operators of disposal facilities must submit monthly reports to the DEQ within 45 days after the end of each calendar month (OAR 340-104-075).</p>	<ul style="list-style-type: none"> ● Check a random sample of monthly reports over the past year for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41b. Continued	<ul style="list-style-type: none"> - facility name and address; - calendar month covered by the report; - description and quantity of each waste received; and - the disposal method used for each waste type and the quantity disposed. 		
AIR EMISSIONS			
2a. Oregon requires anyone constructing, installing, or establishing a new source of air contaminant emissions to notify the DEQ in writing and obtain a Notice of Approval prior to commencing construction (OAR 340-20-30).	<ul style="list-style-type: none"> ● Verify that the facility has obtained a Notice of Approval for any construction of new sources. 		
2b. Oregon also requires anyone operating any air contaminant source to first obtain a permit from the DEQ or the Lane Regional Air Pollution Authority (OAR 340-20-155).	<ul style="list-style-type: none"> ● Verify that the facility has a valid operating permit. 		
4a. All stationary sources must meet specified opacity limits (OAR 340-21-015).	<ul style="list-style-type: none"> ● Verify that no air emissions have an opacity greater than 40%, unless the emission is for less than 3 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>4a. Continued</p> <p>4b. Oregon has regulations for fugitive dust emissions (OAR 340-21-060).</p> <p>10. Owners and operators of demolition or renovation operations must notify the DEQ prior to the commencement of any demolition or renovation involving friable asbestos (OAR 340-25-465).</p> <p>13. Owners and operators of demolition or renovation operations must meet certain asbestos waste disposal requirements [OAR 340-25-465(10)].</p>	<p>minutes per hour, excluding uncombined water vapor.</p> <ul style="list-style-type: none"> ● Verify that the facility takes reasonable efforts to prevent and control fugitive dust emissions. ● Verify that the appropriate notification is sent. ● Verify that the landfill operator has been notified that asbestos-containing wastes are being shipped to his facility prior to shipment and that he has approved the shipment. ● Verify that asbestos-containing wastes are not stored in the open. ● Verify that asbestos-containing wastes are transported in leak-tight containers (plastic bags of 6 mils or more thickness or in metal drums) and are labeled as containing asbestos. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>WATER DISCHARGES</p> <ol style="list-style-type: none"> 1. Oregon requires a permit for the discharge of pollutants from any point source into waters of the State (OAR 340-45-015). 2. The permit may require monitoring of discharge flow and pollutant mass or concentration [OAR 340-45-035(1)(b)]. 5. The permit may specify reporting and recordkeeping requirements [OAR 340-45-065(2)]. 	<ul style="list-style-type: none"> ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● Determine if monitoring requirements are specified in the permit (see federal checklist for instruction). ● Verify that the facility complies with any reporting and recordkeeping requirements. ● Any monitoring and analyses performed more frequently than is required by the permit must be reported to the DEQ in the required discharge monitoring reports. 		

APPENDIX L

PENNSYLVANIA CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>13. Generators in Pennsylvania must develop a contingency plan for "effective action to minimize and abate discharges or spills of hazardous waste" and must submit the plan to the Pennsylvania Department of Environmental Resources (DER) [25 Pennsylvania Code (PC) 75.262(m)(5)].</p> <p>15. Generators must contact the TSD facility to which they want to ship wastes and obtain a copy of a written authorization from that facility prior to shipping the waste [25 PC 75.262(d)].</p> <p>16. Pennsylvania requires the use of the state version of the federal Uniform Hazardous Waste Manifest [25 PC 25.262(e)].</p> <p>19. Generators must retain copies of manifests and certain records and reports for 20 years [25 PC 25.262(h)].</p>	<ul style="list-style-type: none"> ● Verify that the facilities contingency plan has been submitted and approved by DER. ● Review a random sample of hazardous waste shipment records for the past year and verify that the facility has received the required written authorization from the TSD facility. ● Verify that the facility uses the Pennsylvania manifest for all of-site shipments of hazardous waste unless the state in which the receiving TSD facility is located requires the use of its state manifest. ● Verify that the facility retains these records for 20 years, as opposed to the federal requirement of 3 years. 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>21. Generators who ship hazardous wastes offsite must submit to the DER quarterly reports no later than the last day of the following month to cover the previous quarter, unless the generator treats, stores, or disposes of his own waste [25 PC 75.262(i)].</p>	<ul style="list-style-type: none"> ● Check the quarterly reports for the past year for timely submission, as follows: <ul style="list-style-type: none"> - By April 30 for January through March; - By July 31 for April through June; - By October 31 for July through September; and - By January 31 for October through December. ● Verify that each report contains the following information: <ul style="list-style-type: none"> - calendar quarter covered by the report; - EPA generator identification number; - facility name and address; - certification signed by the owner/operator of the facility; - EPA TSD facility identification number; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
21. Continued	<ul style="list-style-type: none"> - TSD facility name and address; and - U.S. DOT shipping name of waste, state manifest document number, hazardous waste number, weight of shipment, and Pennsylvania transporter identification number. 		
25. Every hazardous waste transporter in Pennsylvania must obtain a license from the DER [25 PC 75.263(c)].	<ul style="list-style-type: none"> ● Verify that any transporter used has a valid DER transporter license. 		
40. Owners and operators of TSD facilities must retain copies of manifests and certain records and reports for 20 years [25 PC 75.264(j)].	<ul style="list-style-type: none"> ● Verify that records are retained for this time period. 		
41a. Owners or operators of TSD facilities who receive offsite shipments must submit to DER quarterly reports no later than the last day of the following month to cover the previous quarter [25 PC 75.264(m)(1)].	<ul style="list-style-type: none"> ● Check the quarterly reports from the past year for timely submission, as follows: <ul style="list-style-type: none"> - By April 30 for January through March; - By July 31 for April through June; 		

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41a. Continued	<ul style="list-style-type: none"> - By October 31 for July through September; and - By January 31 for October through December. ● Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - EPA generator identification number; - generators name and address; and - U.S. DOT shipping name of waste received, state manifest document number, hazardous waste number, handling method and date, weight of shipment, and PA transporter identification number. 		
41b. Owners or operators of TSD facilities who receive no offsite shipments must submit to DER annual reports no later than March 1 for the previous year [25 PC 75.264(m)(2)].	<ul style="list-style-type: none"> ● Check last year's annual report and verify that it contains the following information: <ul style="list-style-type: none"> - calendar year covered by the report; 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41b. Continued	<ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - EPA generator identification number; - certification signed by the owner/operator of the facility; - description of waste received, hazardous waste number, handling method, and total annual weight. 		
AIR EMISSIONS			
2. Pennsylvania requires a permit to construct or modify and operate any air contaminant source (25 PC 127).	<ul style="list-style-type: none"> ● Verify that the facility has obtained a permit for any construction of new sources and has a valid Permit to Operate any existing source. 		
4a. All stationary sources must meet specified opacity limits (25 PC 123.41).	<ul style="list-style-type: none"> ● Verify that no air emissions have an opacity greater than 20%, unless the emission is for less than 3 minutes per hour at less than 60% opacity (excluding uncombined water vapor). 		

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<p>4b. Pennsylvania regulates fugitive dust emissions (25 PC 123.2).</p> <p>9. Pennsylvania has adopted by reference the federal NESHAPs.</p> <p>WATER DISCHARGES</p> <p>1. Pennsylvania requires permits for the discharge of pollutants from any point source into waters of the Commonwealth (25 PC 92.3).</p> <p>2. The permit may require monitoring of discharge flow and pollutant mass or concentration (25 PC 92.41).</p> <p>5. The permit may impose reporting and recordkeeping requirements [25 PC 92.41(d)].</p>	<ul style="list-style-type: none"> ● Verify that the facility takes reasonable efforts to prevent and control fugitive dust emissions and that any such emissions are not visible, at any time, at the point such emissions pass outside the person's property from where the emission originated. ● See the federal checklist for instructions. ● Examine any state NPDES discharge permit and verify that all the information contained in the permit is still valid. ● Determine if monitoring requirements are specified in the permit (see federal checklist for instruction). ● Verify that the facility complies with any reporting and recordkeeping requirements (see federal checklist for instructions). 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>5. Continued</p> <p>6. The permit may contain a compliance schedule to have the permittee achieve applicable effluent standards and limitations, water quality standards, and other applicable requirements (25 PC 92.55).</p> <p>8. Sites which discharge industrial wastewater into a POTW must meet certain requirements (25 PC 97.91).</p>	<ul style="list-style-type: none"> Any monitoring and analyses performed more frequently than is required by the permit must be reported to the DER in the required discharge monitoring reports. Examine the permit for any compliance schedules and verify that these schedules are being satisfied (see federal checklist for instructions). Verify that the facility complies with any local pretreatment standards within 3 years of their promulgation. Verify that the facility does not dilute their discharges in order to comply with any pretreatment standards. Verify that the facility send a baseline report to DER within 180 days of becoming subject to any pretreatment standards. If such a report has been sent, obtain a copy and verify that it contains the following information: 		

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8. Continued	<ul style="list-style-type: none"> - name and address of facility; - list of permits held; - pretreatment standards to which the facility became subject; - measured average and maximum flow of discharge to the POTW; and - results of any sampling and analysis identifying the mass of pollutant, if required. 		
9. The discharge of industrial wastes to waters of the Commonwealth either directly or indirectly through a POTW is regulated in Pennsylvania (25 PC 97).	<ul style="list-style-type: none"> ● Verify that the pollutant load discharged is reduced to the maximum extent practical by process changes, reuse of water, waste segregation, and other measures of good housekeeping. ● Verify that any discharge: <ul style="list-style-type: none"> - does not have a pH of less than 6.0 or greater than 9.0, unless authorized by DER; and - contains equal to or less than 7 mg/liter of dissolved iron. 		

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<p>11. As an additional requirement, Pennsylvania requires well-drilling operations (excluding oil or gas drilling) to have a sump or other receptacle large enough to receive all drill cuttings, sand bailings, water having a turbidity in excess of 1,000 ppm, or other polluting wastes resulting from the drilling operations (25 PC 97.61).</p>	<ul style="list-style-type: none"> ● Verify that such a sump or receptacle is used. ● Verify that after the well is completed, the sump or receptacle is covered or otherwise protected or its contents removed and disposed of, so that the contents will not be washed into any waters of the Commonwealth. 		

APPENDIX M

TENNESSEE CHECKLIST

Installation:	Compliance Category:	Auditor(s):	Date:
REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>HAZARDOUS WASTE MANAGEMENT</p> <p>21. Generators who ship hazardous wastes offsite must submit to the Tennessee Department of Health and the Environment (TDHE) an annual generator report by March 1 for the preceding calendar year [1200-1-11-.03(5)(b)].</p>	<ul style="list-style-type: none"> ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA generator identification number; - facility name and address; - calendar year covered by the report; - EPA TSD facility identification number; - TSD facility name and address; - description, waste code, handling method, and quantity of each waste shipped; and - certification signed by the owner/operator of the facility. ● Verify that the facility pays an annual maintenance fee to the 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
<p>21. Continued</p> <p>25. Every hazardous waste transporter must obtain a permit from the TDHE [1200-1-11-.04(2)(a)].</p> <p>28. Owners or operators of TSD facilities must pay an annual fee to the state based on the design capacity of the facility (1200-1-11-.08).</p> <p>41a. Owners or operators of TSD facilities must submit to TDHE an annual report [1200-1-11-.06(f)].</p>	<p>state by March 1 of each year that wastes are shipped offsite for treatment, storage, or deposal.</p> <ul style="list-style-type: none"> ● Verify that any transporter used has a valid TDHE transporter permit. ● Verify that the facility pays the appropriate fees. ● Check last year's annual report for completeness and timely submission. Verify that each report contains the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - calendar year covered by the report; - description and quantity of each waste received; 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41a. Continued	<ul style="list-style-type: none"> - certification signed by the owner/operator of the facility; - method of treatment, storage, or disposal for each waste; and - description of changes in volume and toxicity of waste actually achieved during treatment. 		
41b. Owners or operators of TSD facilities must also submit to TDHE Unmanifested Waste Reports within 15 days of receiving unmanifested hazardous wastes [1200-1-11-.06(g)].	<ul style="list-style-type: none"> ● Determine if the facility accepts unmanifested waste, and, if so, if Unmanifested Waste Reports are sent to TDHE. ● Obtain a copy of the reports and verify that they contain the following information: <ul style="list-style-type: none"> - EPA TSD facility identification number; - facility name and address; - date the unmanifested waste was accepted; - identification number, name, and address of generator and transporter, if available; 		

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REGULATORY REQUIREMENTS	INSTRUCTIONS TO AUDITOR	AUDITOR COMMENTS	FINDINGS
41b. Continued	<ul style="list-style-type: none"> - description and quantity of waste received; - certification signed by the owner or operator of the facility; and - a brief explanation of why the waste was unmanifested. 		
AIR EMISSIONS			
2. Tennessee requires a construction permit to construct or modify any air contaminant source [1200-3-9-.01(1)].	<ul style="list-style-type: none"> ● Verify that the facility has obtained a construction permit. 		
4a. Tennessee prohibits the discharge of visible emissions from any air contaminant source with an opacity in excess of 20% for an aggregate of more than 5 minute in any 1 hour period or 20 minutes in any 24 hour period [1200-3-5-.01(1)].	<ul style="list-style-type: none"> ● Verify that the opacity standards are met. 		
4b. Tennessee regulates fugitive dust emissions (1200-3-8-.01).	<ul style="list-style-type: none"> ● Verify that the facility initiates reasonable efforts to prevent and control fugitive dust emissions at the time when the dust-emitting operation begins. 		