

Waste Management Guidance Manual For Project Delivery

Appendices



pennsylvania

DEPARTMENT OF TRANSPORTATION

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Appendix A

Acronyms and Definitions

APPENDIX A – DEFINITIONS, ACRONYMS, AND REGULATORY REFERENCES

ACRONYMS

ACM: Asbestos-Containing Materials

ACBM: Asbestos-Containing Building Materials

APC: Asbestos Program Coordinator

API: American Petroleum Institute

AST: Aboveground Storage Tank

ASTM: American Society for Testing and Materials

BMP: Best Management Practice(s)

CAS: Chemical Abstracts Service

C&D: Construction and Demolition debris

CDRA: Covered Device Recycling Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CESQG: Conditionally Exempt Small Quantity Generator

CFC: Chloroflourocarbon

CFR: Code of Federal Regulations

CFRP: Combined Facility Response Plan

CGS: Current Generation Slag

CWA: Clean Water Act

DMEC: District Maintenance Environmental Coordinator

DOT: Department of Transportation

EPA: U.S. Environmental Protection Agency

E&S: Erosion and Sediment

ESA: Environmental Site Assessment

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act

FR: Federal Register

HAZWOPER: Hazardous Waste Operations and Emergency Response (training)

HQ-CWF: High-Quality Cold Water Fishery

HSWA: Hazardous and Solid Waste Amendments of 1984

ICW: Infectious and Chemotherapeutic Waste

ID: Identification

Kg: Kilogram

LCGE: Land Clearing, Grubbing, and Excavation

LDR: Land Disposal Restrictions (40 CFR Part 268)

LQG: Large Quantity Generator (of hazardous waste)

LQH UW: Large Quantity Handler of Universal Waste

MoFP: PADEP Management of Fill Policy

MSC: Medium-Specific Concentration

MSDS: Material Safety Data Sheet

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NOB: Non-Friable Organically Bound asbestos containing materials

NPDES: National Pollutant Discharge Elimination System

OSHA: Occupational Safety and Health Administration

PADEP: Pennsylvania Department of Environmental Protection

PCBs: Polychlorinated Biphenyls

PDA: Pennsylvania Department of Agriculture

PennDOT: Pennsylvania Department of Transportation

PID: Photoionization Detector

PLM: Polarized Light Microscopy

POTW: Publicly Owned Treatment Works

RACM: Regulated Asbestos-Containing Material

RAP: Recycled Asphalt Pavement

RCRA: Resource Conservation and Recovery Act

SDS: Safety Data Sheet

SVOCs: Semi-Volatile Organic Compounds

SEMP: Strategic Environmental Management Program

SPCC: Spill Prevention, Control and Countermeasures (Plan)

SPLP: Synthetic Precipitation Leaching Procedure

SQG: Small Quantity Generator (of hazardous waste)

SRS: Source Reduction Strategy

SQH UW: Small Quantity Handler of Universal Waste

TAL: Target Analyte List

TCE: Temporary Construction Easement

TCLP: Toxic Characteristic Leaching Procedure

TEM: Transmission Electron Microscopy

TSDF: Transportation Storage and Disposal Facility

UHWHM: Uniform Hazardous Waste Manifest

USEPA: United States Environmental Protection Agency

UST: Underground Storage Tank

VOCs: Volatile Organic Compounds

VSQG: Very Small Quantity Generator (of hazardous waste)

WSR: Waste Shipment Record

DEFINITIONS

Asbestos Containing Material (ACM): means any material that contains >1% asbestos by weight.

Acute Hazardous Waste: A waste which contains dangerous chemicals that could pose a threat to human health and the environment even when properly managed. A chemical is acutely toxic if it is fatal to humans in low doses, if scientific studies have shown that it has lethal effects on experimental organisms or if it has lethal effects on experimental organisms, or if it causes serious irreversible or incapacitating illness.

Battery: A device consisting of one or more electrically connected electrochemical cells that is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

Beneficial use: use or reuse of residual waste or residual material derived from residual waste for commercial, industrial or governmental purposes, if the use does not harm or threaten public health, safety, welfare or the environment, or the use or reuse of processed municipal waste for any purpose, if the use does not harm or threaten public health, safety, welfare or the environment.

Category I nonfriable asbestos-containing material (ACM): means asbestos-containing packings, gaskets, resilient floor tiles, and asphalt roofing products containing > 1% asbestos.

Category II nonfriable asbestos-containing material (ACM): means all other nonfriable ACM that are not considered Category I non-friable, e.g. Transite®, cement board products, caulking, and expansion joint materials.

Construction material: The engineered use of residual waste as a substitute for a raw material or a commercial product in a construction activity, if the waste has the same engineering characteristics as the raw material or commercial product for which it is substituting. The term includes the use of residual waste as a road bed material, for pipe bedding, and in similar operations.

Demolition: The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility. For bridges, a “load-supporting structural member” is an abutment or pier, but does not include the bridge deck.

Facility: An institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual

dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site

Friable Asbestos Material: Any material that contains > 1% asbestos that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. The term also includes nonfriable ACM after such previously nonfriable material becomes damaged to the extent that, when dry, it may be crumbled, pulverized or reduced to powder by hand pressure.

Hazardous Material: A hazardous material is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

Hazardous Waste: A waste with properties that may cause or significantly contribute to an increase in serious illness or may pose a substantial hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used, disposed of, or otherwise managed, as defined by Title 40 261.11 of EPA's solid waste regulations.

Hazardous Waste Generator: Any person, company or government agency, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation.

Lamp (Universal Waste Lamp): The bulb or tube portion of an electric device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples include fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium and metal halide lamps.

Large Quantity Generator (LQG): A facility that generates over 1,000 kg (2,200 lbs) of hazardous waste or generates more than 1 kg (2.2 lbs) of acute hazardous waste in a calendar month is classified as a Large Quantity Generator (SQG).

Large Quantity Handlers of Universal Waste (LQH UW): Accumulate 5,000 kg (11,000 lbs) or more of universal waste at any one time.

Mercury-Containing Equipment: A device or part of a device that contains elemental mercury integral to its function. Included thermostats, but excludes batteries and lamps.

Municipal Waste – Garbage, refuse, industrial lunchroom or office waste resulting from operation of residential, municipal, commercial or institutional establishments and from community activities.

NESHAP Regulated Asbestos Projects: mean all demolition projects and asbestos renovation projects that meet the RACM (Regulated Asbestos Containing Material) definition.

Pesticides: Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant.

RCRA Empty: EPA defined condition for empty storage containers previously containing hazardous waste. There are two separate conditions, one that applies to non-acute hazardous wastes and one that applies to acute hazardous wastes. RCRA Empty for **non-acute** hazardous wastes:

- All wastes have been removed that can be removed using 'commonly employed practices' from that type of container, **and one of the following:**
 - No more than 2.5 centimeters (1 inch) of residue remains on the bottom of the container or liner, **or**

- For containers \leq 110-gallons: no more than 3 percent of the total capacity of the container remains (by weight), **or**
- For containers \geq 110-gallons: no more than 0.3 percent of the total capacity of the container remains (by weight)

RCRA Empty for **acute** hazardous wastes:

- The container is triple rinsed with a solvent capable of removing the acute waste, **or**
- The container has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal, **or**
- The inner liner that prevented contact between the acute waste and the container is removed

Regulated Asbestos-Containing Materials (RACM):

- Friable asbestos material, material that contains $> 1\%$ asbestos, that is present in quantities > 260 linear feet on pipes, or 160 square feet on other facility components, or 35 cubic feet on other facility components where the area could not be measured previously (i.e., presumed RACM); and/or
- Category I nonfriable ACM that has become friable, or that will be or has been subject to sanding, grinding, cutting, or abrading; and/or
- Category II nonfriable ACM that has a high probability of becoming friable during demolition or renovation operations.

Residual Waste: Garbage, refuse, other discarded material or waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural waste supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous.

Small Quantity Generators (SQG): A facility that generates more than 100 kg (220 lbs) and less than 1000 kg (2,200 lbs) of hazardous waste or generates no more than 1 kg (2.2 lbs) of acute hazardous waste in a calendar month.

Small Quantity Handler of Universal Waste: A universal waste handler who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

Special Handling Waste: Solid waste that requires the application of special storage, collection, transportation, processing or disposal techniques due to the quantity of material generated or its unique physical, chemical or biological characteristics. The term includes dredged material, sewage sludge, infectious waste, chemotherapeutic waste, ash residue from a solid waste incineration facility, friable asbestos-containing waste, PCB-containing waste, waste oil that is not hazardous waste, fuel contaminated soil, waste tires and water supply treatment plant sludge.

Small Quantity Handlers of Universal Waste (SQH UW): Accumulate less than 5,000 kg (11,000 lbs) of universal waste at any one time.

Treatment, Storage, Disposal Facilities (TSDF): Facilities engaged in the treatment, storage, or disposal of hazardous waste. These facilities are the last link in the cradle-to-grave hazardous waste management system.

Universal Waste: Hazardous wastes that are subject to the universal waste requirements of 40 CFR 273. Universal Waste is a hazardous waste, but because it is generated by a large number of businesses in relatively small quantities, the EPA issued this special waste category to promote

recycling of select waste streams while reducing the burden to generators from managing these wastes in the same stringent manner as waste that are defined traditionally as “hazardous.”

Used oil: A petroleum-based or synthetic oil which is used in an internal combustion engine as an engine lubricant, or as a product for lubricating motor vehicle transmissions, gears or axles which through use, storage or handling has become unsuitable for its original purpose due to the presence of chemical or physical impurities or loss of original properties.

Very Small Quantity Generators (VSQG's): A facility that generates no more than 100 kg (220 lbs) of hazardous waste or generates no more than 1 kg (2.2 lbs) of acute hazardous waste in a calendar month.

Waste oil: Oil refined from crude oil or synthetically produced, used and as a result of the use, contaminated by physical or chemical impurities. The term includes used oil.

REGULATORY REFERENCES

Aboveground Storage Tanks

- Pennsylvania Regulations - *25 Pa Code 245*

Hazardous Waste

- EPA Hazardous Waste Management Regulations - *40 CFR 260-270*
- Pennsylvania Regulations (adopted by reference) - *25 PA Code 261a.1-270a*
- Toxicity Characteristic Leaching Procedure (TCLP) - *40 CFR 261.24, Table 1*
- Conditionally Exempt Small Quantity Generator Requirements - *40 CFR 273.15 through 40 CFR 273.20*
- Small Quantity Generator Requirements - *40 CFR 273.15 through 40 CFR 273.20*
- Large Quantity Generator Requirements - *273.30 through 40 CFR 273.40*
- Hazardous Waste Containers - *Per 40 CFR 262.30*

Municipal Waste

- PADEP Municipal Waste Management Regulations - *25 PA Code 271, 273, 275, 277, 279, 281, 283, and 285*
- Municipal Waste Storage and Management - *25 Pa Code 285*

Residual Waste

- Residual Waste Management Regulations - *Article IX, 25 Pa Codes 287-299*
- Coproduct and Byproducts Determination - *25 PA Code 287.1*
- Residual Waste Generator Status Determination - *25 Pa Code 287.51*
- Residual Waste Storage Times - *25 Pa Code 299.113*
- Residual Waste Record Keeping - *25 Pa Code 287.55*
- Residual Waste Storage Requirements - *25 Pa Code 299.101 through 299.133*
- Aboveground Storage Tanks - *25 Pa Code 299.122*

Special Handling Wastes

- National Emission Standard for Asbestos - *40 CFR 61.140—61.156*
- *Infectious Wastes, Chemotherapeutic Wastes, and Used Sharps Waste* - *25 Pa Code 284*

Underground Storage Tanks

- Pennsylvania Regulations - *25 Pa Code 245*

Universal Waste

- EPA Universal Waste Management Regulations - *40 CFR 273*
- Pennsylvania Universal Waste Management Regulations (adopted by reference) - *25 Pa Code 266b*
- Small Quantity Generator Requirements - *40 CFR 273.15 through 40 CFR 273.20*
- Large Quantity Generator Requirements - *40 CFR 273.30 through 40 CFR 273.40*

Waste Transportation

- Pennsylvania Act 90 Authorization Sticker –
 - <http://www.dep.pa.gov/Business/Land/Waste/SolidWaste/Municipal-Residual-Waste--Transportation/Pages/default.aspx>
- Federal Waste Transportation - *40 CFR 172, 173, 178, and 179*

Appendix B

Regulatory Contact Information

REGULATORY CONTACTS

ENVIRONMENTAL PROTECTION AGENCY

Region III – Mid-Atlantic

(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia)

1650 Arch Street, Philadelphia, PA 19103-2029

Main Telephone Number: (215) 814-5000 Main Fax Number: (215) 814-5103

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Region I - Southeast Regional Office

(Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties)

2 East Main Street, Norristown, PA 19401-4915

Main Telephone Number: (484) 250-5900 Main Fax Number: (484) 250-5914

Emergency Response Coordinator	(484) 250-5942
Clean Water Program	(484) 250-5970
Waterways and Wetlands Program	(484) 250-5160
Air Quality Program	(484) 250-5920
Waste Management Program	(484) 250-5960
Environmental Cleanup	(484) 250-5960

Region II - Northeast Regional Office

(Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming Counties)

2 Public Square, Wilkes-Barre, PA 18771-0790

Main Telephone Number: (570) 826-2511 Main Fax Number: (570) 830-3054

Emergency Response Coordinator	(570) 826-2511
Clean Water Program	(570) 826-2511
Waterways and Wetlands Program	(570) 826-2511
Air Quality Program	(570) 826-2511
Waste Management Program	(570) 826-2511
Environmental Cleanup	(570) 826-2511

Region III - Southcentral Regional Office

(Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York Counties)

909 Elmerton Avenue, Harrisburg, PA 17110-8200

Main Telephone Number: (717) 705-4700 Main Fax Number: (717) 705-4930

Emergency Response Coordinator	(866) 825-0208
Clean Water Program	(717) 705-4707
Waterways and Wetlands Program	(717) 705-4802
Air Quality Program	(717) 705-4702
Waste Management Program	(717) 705-4706
Environmental Cleanup	(717) 705-4705

Region IV - Northcentral Regional Office

(Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union Counties)

208 West 3rd Street, Suite 101, Williamsport, PA 17701

Main Telephone Number: (570) 327-3636 Main Fax Number: (570) 327-3565

Emergency Response Coordinator (570) 327-3695

Clean Water Program (570) 327-3670

Waterways and Wetlands Program (570) 327-3574

Air Quality Program (570) 327-3638

Waste Management Program (570) 327-3653

Environmental Cleanup (570) 321-6525

Region V - Southwest Regional Office

(Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, and Westmoreland Counties)

400 Waterfront Drive, Pittsburgh, PA 15222-4745

Main Telephone Number: (412) 442-4000 Main Fax Number: (412)-442-4194

Emergency Response Coordinator (412) 442-4192

Clean Water Program (412) 442-4032

Waterways and Wetlands Program (412) 442-4315

Air Quality Program (412) 442-5215

Waste Management Program (412) 442-4125

Environmental Cleanup (412) 442-4091

Region VI - Northwest Regional Office

(Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, and Warren Counties)

230 Chestnut Street, Meadville, PA 16335-3481

Main Telephone Number: (814) 332-6945 Main Fax Number: (814) 332-6344

Emergency Response Coordinator (814) 332-6816

Clean Water Program (814) 332-6942

Waterways and Wetlands Program (814) 332-6984

Air Quality Program (814) 332-6940

Waste Management Program (814) 332-6848

Environmental Cleanup (814) 332-6648

PA DEP Central Office – Bureau of Waste Management

Post Office Box 69170, Harrisburg, PA 17106-9170

Main Telephone Number: (717) 783-2388 Main Fax Number: (717) 787-1904

Waste Minimization and Planning (717) 787-9871

Municipal and Residual Waste Program (717) 787-7381

Hazardous Waste Program (717) 787-6239

PA DEP Central Office – Bureau of Air Quality

P.O. Box 8468, Harrisburg, PA 17105-8468

Main Telephone Number: (717) 787-9702 Main Fax Number: (717) 772-2303

Appendix C

Hazardous Waste Determination Reference Documents

The EPA document entitled "Hazardous Waste Listings" provided herein shall be used as a reference as needed for the hazardous waste determination process. Please note, because this is an older reference document, many of the URL links provided in the text no longer work. For further guidance, please refer to 40 CFR §261.31through 40 CFR §261.33 or <https://archive.epa.gov> for more information.

Hazardous Waste Listings

A User-Friendly Reference Document

September 2012

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Introduction

This document is Environmental Protection Agency's (EPA's) first update of the March 2008 web-based reference document on hazardous waste listings. In preparing this update, our key objectives were to identify and include new listing-related materials (e.g., letters, memoranda, and Federal Register notices) issued to the public by EPA since March 2008, provide hyperlinks to websites which include the new listing-related materials, and correct or remove hyperlinks to websites present in the 2008 document that have either changed or no longer exist. Please note that, because there have only been a small number of new listing-related materials issued to the public by EPA since March 2008, the content of this document is not significantly different than the 2008 document.

This document describes EPA's hazardous waste listing regulations under the authority of the Resource Conservation and Recovery Act (RCRA) Subtitle C¹ and includes hyperlinks to information that EPA has generated over the years to explain the listing regulations. The purpose of this document is to consolidate and streamline the information on listing regulations to help Environmental Protection Agency (EPA) staff, state staff, industrial facilities, and the public understand hazardous waste listing regulations.

This document is only a reference document and is not to be used as a substitute for the Code of Federal Regulations (CFR), itself, or the requirements contained in the CFR. This document is not a rulemaking. Additionally, this document only describes wastes that are considered listed hazardous wastes under the federal regulations. Most states are authorized to manage their own hazardous waste identification program. Therefore, states may have their own set of regulations that apply in lieu of federal regulations, and while most state hazardous waste regulations are based on the federal requirements, some states have developed regulations more stringent than the federal program. We direct you to the following website to determine if the state regulatory program is different from the federal program:

<http://www.epa.gov/epawaste/wyl/stateprograms.htm>

This document is organized in a manner similar to the way identification and listing of hazardous waste regulations are presented in Title 40 of the CFR at Part 261. Therefore, following an overview of the hazardous waste identification process, this document will present the four different lists under the RCRA regulations that describe the listed hazardous wastes. At the conclusion of this document, a procedure under the regulations to delist a waste is also described.

Please note that the Title 40 of the CFR at Part 261 information contained in this document is from the Government Printing Office's Electronic Code of Federal Register (e-CFR) website as it existed in July 2012. To help stakeholders better understand specific requirements, we also have provided, where applicable, hyperlinks to Federal Register notices, letters and memoranda issued by EPA, questions and answers (Q&As) on listing issues of concern, as well as guidance documents developed by EPA that help in understanding the hazardous waste listing regulations.

¹ Subtitle C of RCRA has been codified in the United States Code (U.S.C.) as the Solid Waste Disposal Act (SWDA), Subchapter III (Hazardous Waste Management), 42 U.S.C. §§ 6921 through 693e

The hyperlinks included in this document for Federal Register notices published prior to October 1994 are from HeinOnline and are available by subscription to HeinOnline. By including this material, EPA does not endorse HeinOnline. We have attempted to identify the relevant FAQs, letters, memoranda, etc. on a particular listing-related subject. However, please note that it is possible that not every document developed over the years has been included in this reference document. Finally, once you have navigated to the regulatory “requirement” of interest, we have provided cross-references to other relevant regulations.

Because regulations are promulgated throughout the year, EPA intends to update this document periodically to remain up-to-date with hazardous waste listing regulations.

Additionally, the Government Printing Office (GPO) frequently updates the [e-CFR](#) website, which can be accessed through this document.

Information on how to navigate through the document

This document is navigable in several ways. First, stakeholders can use the Summary Chart on page eight to link directly to specific sections of the regulatory requirements for identification and listing of hazardous waste in the ([e-CFR](#)). The hyperlinks in the chart to the e-CFR can be opened by left-clicking on the mouse. This should be followed by clicking on the links to specific parts and then sections of interest. Second, the pages on the Table of Contents can be opened in the same manner as described above to navigate through the body of the document. The information contained in this website is current as of the date shown on the opened page. Finally, hyperlinks are contained within the lists of hazardous wastes following groupings of these wastes and can be opened to obtain further information on these wastes.

Contact Information

This document was developed by the Materials Recovery and Waste Management Division in the Office of Resource Conservation and Recovery. Please send any questions concerning this document to the following email address: chaudhari.narendra@epa.gov.

Overview of the Hazardous Waste Identification Process

EPA's regulations establish two ways of identifying solid wastes as hazardous under RCRA. A waste may be considered hazardous if it exhibits certain hazardous properties ("characteristics") or if it is included on a specific list of wastes EPA has determined are hazardous ("listing" a waste as hazardous) because we found them to pose substantial present or potential hazards to human health or the environment. EPA's regulations in the Code of Federal Regulations define four hazardous waste characteristic properties: ignitability, corrosivity, reactivity, or toxicity (see 40 CFR 261.21-261.24). This document presents the regulations developed that list wastes as hazardous in §§ 261.31 through 261.33. EPA plans to develop a separate document for characteristic wastes.

In order to list wastes EPA conducts a more specific assessment of a particular waste or category of wastes. The Agency will "list" them if they meet criteria set out in 40 CFR 261.11. As described in § 261.11, we may list a waste as hazardous if the waste:

- exhibits any of the characteristics, i.e., ignitability, corrosivity, reactivity, or toxicity (§261.11(a)(1));
- is "acutely" hazardous (e.g., if it is fatal to humans or animals at low doses, §261.11(a)(2)); or
- it contains any of the toxic constituents listed in 40 CFR part 261, Appendix VIII and, after consideration of various factors described in the regulation, is capable of posing a "substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed" (§261.11(a)(3)).

We place a substance on the list of hazardous constituents in Appendix VIII if scientific studies have shown the substance has toxic effects on humans or other life forms.

Lists of Hazardous Wastes

There are four different lists of hazardous wastes that are located in Title 40 of the CFR at Part 261. These four lists are:

- **The F list (non-specific source wastes)** - The F list designates as hazardous particular solid wastes from certain industrial or manufacturing processes. Because the processes producing these wastes can occur in different sectors of industry, the F list wastes are known as wastes from nonspecific sources. Wastes included on the F list are found in the regulations at 40 CFR § 261.31.
- **The K list (source-specific wastes)** - The K list designates particular solid wastes from certain specific industries as hazardous. Wastes included on the K list are found in the regulations at 40 CFR § 261.32.

- **The P list and the U list (discarded commercial chemical products)** - These two lists are similar in that both list as hazardous certain commercial chemical products when they are discarded or intended to be discarded. These listings consist of commercial chemical products having the generic names listed, off-specification species, container residues, and spill residues. The difference is that the chemicals on the P list are identified as acute hazardous wastes and those on the U list are identified as toxic wastes. Some chemicals on both lists may also be designated to have other properties. Wastes included on the P and U lists can be found in the regulations at 40 CFR § 261.33.

The above four lists each designate anywhere from 30 to a few hundred wastestreams as hazardous. Each waste on the lists is assigned a waste code consisting of the letter associated with the list followed by three numbers. For example, the wastes on the F list are assigned the waste codes F001, F002, and so on. These waste codes are an important part of the RCRA regulatory system. Assigning the correct waste code to a waste has important implications for the management standards that apply to the waste.

The wastes listed on the F and K lists described above can be divided further into subgroups as described below:

F Waste Groupings

It may be helpful to consider that the F waste codes are divided into seven subgroups of wastes, generally depending on the type of manufacturing or industrial operation that creates them. The seven general subgroups of F-listed wastes are:

- spent solvent wastes (F001 - F005)
- wastes from electroplating and other metal finishing operations (F006 - F012, and F019)
- dioxin bearing wastes (F020 - F023 and F026 - F028)
- wastes from production of certain chlorinated aliphatic hydrocarbons (F024 and F025)
- wastes from wood preserving (F032, F034, and F035)
- petroleum refinery wastewater treatment sludges (F037 and F038)
- multisource leachate (F039)

K Waste Groupings

The K waste codes are divided into 13 subgroups of wastes from specific sources. The 13 subgroups of K-listed wastes are:

- wood preservation (K001)
- inorganic pigment manufacturing (K002 - K008)
- organic chemicals manufacturing (K009 - K011, K013 - K030, K083, K085, K093 - K096, K103 - K105, K107 - K118, K136, K149 - K151, K156 - K159, K161,

- K174 - K175, and K181)
- inorganic chemicals manufacturing (K071, K073, K106, and K176 - K178)
- pesticides manufacturing (K031 - K043, K097 - K099, K123 - K126, and K131 - K132)
- explosives manufacturing (K044 - K047)
- petroleum refining (K048 - K052, and K169 - K172)
- iron and steel production (K061 and K062)
- primary aluminum production (K088)
- secondary lead processing (K069 and K100)
- veterinary pharmaceuticals manufacturing (K084 and K101 - K102)
- ink formulation (K086)
- coking (K060, K141 - K145, and K147 - K148)

Summary Chart

Links to Specific Sections of the CFR on Listing of Hazardous Waste

1	Criteria for Listing Hazardous Waste	See 40 CFR 261.11 in the e-CFR
2	Lists of Hazardous Waste - General	See 40 CFR 261.30 in the e-CFR
3	Hazardous Wastes from Non-specific Sources	See 40 CFR 261.31 in the e-CFR
4	Hazardous Wastes from Specific Sources	See 40 CFR 261.32 in the e-CFR
5	Discarded Commercial Chemical Products, Off-specification species, Container Residues, and Spill Residues thereof	See 40 CFR 261.33 in the e-CFR

General Hazardous Waste Listing Resources

- Electronic Code of Federal Regulations containing all EPA regulations
[e-CFR: Title 40 -- Protection of Environment \(Parts 1-799\)](#)
- Hazardous waste web page on the EPA website
[Hazardous Waste](#)
- Training documents for RCRA on the EPA website
[RCRA Training Modules](#)
- Federal Register notices on the Environment since October 1994 on the EPA and Regulations.gov websites
[Federal Register Notices](#)
- Training document on hazardous waste identification
[Introduction to Hazardous Waste Identification](#)
- Website to find dockets containing background documents for F and K lists of wastes
<http://www.regulations.gov>

On this website, enter identification number “EPA-HQ-RCRA-2004-0016” to search background documents for the F list wastes and enter identification number “EPA-HQ-RCRA-2004-0017” to search background documents for the K list wastes.

- Website for RCRA Frequent Questions Database
<http://waste.supportportal.com/ics/support/splash.asp>

Some Important Federal Register Notices for the F, K, P, and U Listings

The following are some early federal register notices that laid the foundation for the hazardous waste listing program. Other federal register notices related to the specific listings are provided in the body of the document under those listings.

- Proposed Rule – Hazardous Waste Guidelines and Regulations
[43 FR 58946; December 18, 1978](#)
- Supplemental Proposed Rule – Hazardous Waste Guidelines and Regulations
[44 FR 49402; August 22, 1979](#)
- Final Rule and Interim Final Rule – First rule on identification and listings of hazardous wastes
[45 FR 33084; May 19, 1980](#)

- Interim Final Rule amending the May 19, 1980 rule (eighteen additional wastes are listed as hazardous)

[45 FR 47832; July 16, 1980](#)

- Final Rule and Interim Final Rule - Listings of eighty hazardous wastes from specific and nonspecific sources

[45 FR 74884; November 12, 1980](#)

- Final Rule - Commercial chemical products, off-specification products, and intermediates

[45 FR 78532; November 25, 1980](#)

- Final Rule and Temporary Suspension of Interim Final Rule - Listings for thirteen wastes from specific sources (K Wastes)

[46 FR 4614; January 16, 1981](#)

Title 40: Protection of Environment

PART 261-IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

§ 261.11 Criteria for listing hazardous waste.

(a) The Administrator shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

(1) It exhibits any of the characteristics of hazardous waste identified in subpart C.

(2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute Hazardous Waste.)

(3) It contains any of the toxic constituents listed in appendix VIII and, after considering the following factors, the Administrator concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:

(i) The nature of the toxicity presented by the constituent.

(ii) The concentration of the constituent in the waste.

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (a)(3)(vii) of this section.

(iv) The persistence of the constituent or any toxic degradation product of the constituent.

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation.

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate.

Substances will be listed on appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Administrator may list classes or types of solid waste as hazardous waste if he has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in section 1004(5) of the Act.

(c) The Administrator will use the criteria for listing specified in this section to establish the exclusion limits referred to in §261.5(c).

[45 FR 33119, May 19, 1980, as amended at 55 FR 18726, May 4, 1990; 57 FR 14, Jan. 2, 1992]

Title 40: Protection of Environment

PART 261-IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Subpart D-List of Hazardous Wastes

§ 261.30 General.

(a) A solid waste is a hazardous waste if it is listed in this subpart, unless it has been excluded from this list under §§ 260.20 and 260.22.

(b) The Administrator will indicate his basis for listing the classes or types of wastes listed in this subpart by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

Appendix VII identifies the constituent which caused the Administrator to list the waste as a Toxicity Characteristic Waste (E) or Toxic Waste (T) in §§ 261.31 and 261.32

(c) Each hazardous waste listed in this subpart is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain recordkeeping and reporting requirements under parts 262 through 265, 268, and part 270 of this chapter.

(d) The following hazardous wastes listed in §261.31 or §261.32 are subject to the exclusion limits for acutely hazardous wastes established in §261.5: EPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, and F027.

[45 FR 33119, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983; 50 FR 2000, Jan. 14, 1985; 51 FR 40636, Nov. 7, 1986; 55 FR 11863, Mar. 29, 1990]

§ 261.31 Hazardous wastes from non-specific sources.

(a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under §§ 260.20 and 260.22 and listed in appendix IX.

Spent solvent wastes (F001 – F005)

Industry and EPA hazardous Waste No.	Hazardous waste	Hazard code
<hr/>		
Generic:		
F001.....	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002.....	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-	(T)

trichloroethane,
chlorobenzene, 1,1,2-
trichloro-1,2,2-
trifluoroethane, ortho-
dichlorobenzene,
trichlorofluoromethane,
and 1,1,2-
trichloroethane; all
spent solvent mixtures/
blends containing,
before use, a total of
ten percent or more (by
volume) of one or more
of the above halogenated
solvents or those listed
in F001, F004, or F005;
and still bottoms from
the recovery of these
spent solvents and spent
solvent mixtures.

F003..... (I)*
The following spent non-
halogenated solvents:
Xylene, acetone, ethyl
acetate, ethyl benzene,
ethyl ether, methyl
isobutyl ketone, n-butyl
alcohol, cyclohexanone,
and methanol; all spent
solvent mixtures/blends
containing, before use,
only the above spent non-
halogenated solvents;
and all spent solvent
mixtures/blends
containing, before use,
one or more of the above
non-halogenated
solvents, and, a total
of ten percent or more
(by volume) of one or
more of those solvents
listed in F001, F002,
F004, and F005; and
still bottoms from the
recovery of these spent
solvents and spent
solvent mixtures.

F004..... (T)
The following spent non-
halogenated solvents:
Cresols and cresylic
acid, and nitrobenzene;
all spent solvent
mixtures/blends
containing, before use,
a total of ten percent
or more (by volume) of
one or more of the above

	non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005.....	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)

Related Resources for F001 – F005 Wastes:

Federal Register Notice(s)

- Final Rule (F001-F005)
[45 FR 33084; May 19, 1980](#)
- Proposed clarification of the scope of the spent solvent listing
[50 FR 18378; April 30, 1985](#)
- Proposed Rule amending the F002 and F005 Listings
[50 FR 30908; July 30, 1985](#)
- Final clarification of the scope of the spent solvent listing
[50 FR 53315; December 31, 1985](#)
- Final Rule amending the F002 and F005 listings
[51 FR 6537; February 25, 1986](#)
- Clarification of RCRA rules for spent CFCs
[54 FR 31335; July 28, 1989](#)

Letters/Memoranda

- F001: [SOLVENTS USED AS COOLANTS AND APPLICABILITY OF SOLVENT LISTINGS](#)
- F001 & F002: [DISCARDED WASTEWATER AT A CORROSION CONTROL FACILITY](#)

- F001 & F002: [CHLOROFLUOROCARBONS \(CFCs\) AS REFRIGERANTS, RECYCLING OF SPENT](#)
- F001 – F005: [REGULATORY STATUS OF WASTE GENERATED BY MCLAUGHLIN GORMLEY KING \(MGK\) COMPANY IN MINNESOTA](#)
- F001 – F005: [WASTE GENERATED DURING THE MANUFACTURE OF POLYURETHANE FOAM](#)
- F001 – F005: [REGULATORY DETERMINATION - SPENT SOLVENT LISTINGS AND THE MIXTURE RULE](#)
- F001 – F005: [RESIDUALS MATERIALS CONTAMINATED WITH TRACE SOLVENTS](#)
- [REGULATORY STATUS OF SOLVENT-CONTAMINATED RAGS AND WIPERS](#)
- F001 – F005: [CLARIFICATION OF SPENT SOLVENT LISTINGS](#)
- F001 – F005: [PAINT SPRAY BOOTH AIR FILTERS](#)
- F001 – F005: [CHLOROFLUOROCARBONS \(CFCs\) FROM PRODUCTION OF FOAM PRODUCTS](#)
- F001 – F005: [TETRACHLOROETHYLENE CONTAMINATED WITH POLYCHLORINATED BIPHENYLS \(PCBs\)](#)
- F001 – F005: [1,1,1-TRICHLOROETHANE CONTAINED IN A SAND-METAL-SOLVENT MIXTURE](#)
- F001 – F005: [SOLVENT AND COMMERCIAL CHEMICAL PRODUCT WASTE STREAMS](#)
- F001 – F005: [WASTE SOLVENT-BASED GLUE](#)
- F001 – F005: [SOLVENT-CONTAMINATED WASTESTREAMS FROM A PHARMACEUTICAL MANUFACTURER; SOLVENT-CONTAMINATED WASTESTREAMS FROM PHARMACEUTICAL MANUFACTURER](#)
- F001 – F005: [PAINT FILTERS, USED](#)
- F001 – F005: [PAINTS CONTAINING SOLVENTS](#)
- F001 – F005: [SOLVENT/MIXTURE BLENDS](#)
- F001 – F005: [PROCESS WASTEWATER FROM METAL DEGREASING OPERATIONS](#)
- F001 – F005: [WASTES CONTAINING F001-F005 CONSTITUENTS](#)
- F001 – F005: [RESIDUALS FROM TREATMENT OF RESTRICTED WASTES NOT COVERED BY LESS-THAN-1% SOLVENT EXTENSION](#)
- F001 – F005: [SOLVENT LISTINGS FOR PAINT WASTES/REMOVER AND SPILL RESIDUE](#)
- F001 – F005: [SOLVENTS USED AS REACTANT AND SOLVENT WASTES GENERATED BY A PRODUCTION PROCESS](#)
- F001 – F005: [SOLVENT LISTINGS, SCOPE OF](#)
- F001 – F005: [SOLVENT LISTINGS, SCOPE OF](#)
- F001 – F005: [APPLICABILITY OF THE F006 CLASSIFICATION TO WASTES FROM THE CHEMICAL ETCHING OF MAGNESIUM](#)
- F002: [DRYCLEANING INDUSTRY WASTES](#)
- F002: [HAZARDOUS WASTE DETERMINATION](#)
- F002: [SPENT SOLVENT LISTINGS & LEACHATE FROM SANITARY LFS THAT RECEIVED HAZARDOUS WASTE](#)
- F002: [PAINTING CONTRACTOR WASTES-SMALL QUANTITY GENERATOR](#)
- F003: [CLARIFICATION OF THE NEW MIXTURE AND DERIVED-FROM RULES FOR F003](#)
- F003: [CLARIFICATION OF THE ""CONTAINED-IN"" POLICY](#)
- F003: [CLASSIFICATION OF F003 WASTES](#)
- F003: [ACETONE AND METHANOL CONTAMINATED WASHWATERS](#)
- F003: [REACTOR VESSEL WASHOUT CONTAINING TRACE AMOUNTS OF SOLVENT CAUSTIC RINSING METAL PARTS](#)
- F003: [F003 10% RULE AND ASSOCIATED REGULATIONS](#)
- F003: [PAINT WASTES AND THE SPENT SOLVENT LISTINGS](#)
- [PROCESS WASTES CONTAINING INKS, PAINTS, AND ADHESIVES](#)
- F003: [MIXTURES OF SOLID AND HAZARDOUS WASTES](#)
- F003: [DILUTION OF F003 WASTES](#)

- F003 & F005: [RCRA ARAR DETERMINATION AT MAXEY FLATS SUPERFUND SITE](#)
- F005: [IDENTIFICATION OF SPENT SOLVENT IN CERTAIN INDUSTRIAL PROCESSES](#)
- F005: [STILL BOTTOM WASTE GENERATED DURING THE PRODUCTION OF POLYSTYRENE](#)
- F005: [STILL BOTTOM WASTE GENERATED BY A POLYSTYRENE PRODUCTION FACILITY](#)
- F005: [TOLUENE-LADEN FILTER RESIDUE GENERATED FROM AN INK PRODUCTION PROCESS](#)
- [CLASSIFICATION OF SOLVENTS ADDED](#)
- [SCOPE OF SPENT SOLVENT LISTINGS](#)
- [SPENT PIPELINE FILTER CARTRIDGES](#)
- [TOLUENE-CONTAINING PAINT PRODUCTS FROM WOOD PIECES, REGULATORY STATUS](#)
- [IRON CAKE WASTE GENERATED DURING THE PRODUCTION OF METHYLDOPA](#)
- [PRE-COAT WASTE CONTAINING 2-ETHOXYETHANOL \(EXTRUDING PROCESS WASTE\)](#)
- [WASTES GENERATED IN A PROCESS USING METHYLENE CHLORIDE TO RECOVER ALKALOIDS FROM PLANT MATTER; WASTES GENERATED FROM EXTRACTION PROCESS](#)
- [ACTIVATED CARBON CANISTERS USED TO COLLECT SOLVENT VAPORS GENERATED DURING PAINT APPLICATION](#)
- [CLARIFICATION ON THE USE OF SOLVENTS AS REACTANTS IN MANUFACTURING PROCESSES](#)

Fact Sheets and Q&As

- Q&A (F001): [HYDROCHLOROFLUOROCARBONS USED IN DEGREASING](#)
- Q&A (F001): [SOLVENT DRIPPINGS FROM DEGREASING OPERATIONS](#)
- Q&A (F001 & F002): [PERCHLOROETHYLENE USED IN DRY CLEANING](#)
- Q&A (F001 & F002): [COMPARATIVE DEFINITIONS OF F001 AND F002](#)
- Q&A (F001 – F005): [DEFINITION OF SPENT SOLVENT](#)
- Q&A (F001 – F005): [HAZARDOUS WASTE I.D.](#)
- Q&A (F001 – F005): [USE AS INGREDIENT NOT WITHIN SOLVENT LISTING](#)
- Q&A (F001 – F005): [THE SOLVENT MIXTURE RULE](#)
- Q&A (F002): [SPENT SOLVENTS](#)
- Q&A (F002): [CARBON FILTERS IN DRY CLEANING FOR FILTERING PERCHLOROETHYLENE](#)
- Q&A (F002): [CLARIFICATION OF SPENT SOLVENT LISTING](#)
- Q&A (F003): [INTERSTATE SHIPMENTS OF WASTE LISTED SOLELY FOR IGNITABILITY, CORROSIVITY, OR REACTIVITY](#)
- Q&A (F003): [F003 WASTES GENERATED PRIOR TO HWIR WASTE RULE](#)
- Q&A (F003): [TECHNICAL GRADE SOLVENT FORMULATIONS AND THE F003 LISTING](#)
- Q&A (F003): [SPENT SOLVENTS IN SCINTILLATION COCKTAILS](#)
- Q&A (F003): [SPENT SOLVENT MIXTURES](#)
- Q&A (F003 & F005): [SOLVENT MIXTURE RULE](#)
- Q&A (F005): [WASTE CLASSIFIED AS BOTH F005 AND K086](#)
- Q&A (F005): [SMALL QUANTITY GENERATOR DETERMINATION](#)
- Q&A: [SPENT SOLVENT LISTINGS](#)

***Wastes from electroplating and other metal finishing operations
(F006 - F012, and F019)***

F006.....	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007.....	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008.....	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009.....	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010.....	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011.....	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012.....	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)

F019..... Wastewater treatment sludges (T) from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in §258.40, §264.301 or §265.301. For the purposes of this listing, motor vehicle manufacturing is defined in paragraph(b)(4)(i) of this section and(b)(4)(ii)of this section describes the recordkeeping requirements for motor vehicle manufacturing facilities

Related Resources for F006 – F012 and F019 Wastes:

Federal Register Notice(s)

- Final Rule (F006 & F019 and F007 – F012)
[45 FR 33084; May 19, 1980](#)
- Interpretive Rule (F006)
[51 FR 43350; December 2, 1986](#)
- Proposed Rule – Amendment to the F019 Listing (exclusion for sludges generated from the zirconium phosphating process)
[54FR 32320; August 4, 1989](#)
- Final Rule – Amendment to the F019 Listing (exclusion for sludges generated from the zirconium phosphating process)
[55FR 5340; February 14, 1990](#)

Letters/Memoranda

- F006: [APPLICABILITY OF THE F006 CLASSIFICATION TO WASTES FROM THE CHEMICAL ETCHING OF MAGNESIUM](#)
- F006: [GENERATOR QUANTITY DETERMINATIONS FOR F006 LISTED SLUDGE](#)
- F006: [ELECTROPLATING WASTEWATER TREATMENT SLUDGES FROM GRAY CAST IRON MANUFACTURING OPERATIONS](#)
- F006: [STEEL PLATING PROCESS AND F006 DEFINITION](#)
- F006: [REGULATORY STATUS OF ION EXCHANGE RESIN WASTE](#)
- F006: [JURISDICTIONAL STATUS UNDER THE RCRA OF CERTAIN METAL-RICH SLUDGES](#)
- F006: [RESPONSE TO PETITION ON PROHIBITION OF USE OF SLAG FROM HIGH TEMPERATURE METALS RECOVERY AS ANTI-SKID/DEICING AGENT](#)
- F006: [ELEMENTARY NEUTRALIZATION UNITS GENERATING AND STORING NON-CORROSIVE HAZARDOUS WASTES](#)
- F006: [APPLICABILITY OF F006 HAZARDOUS WASTE CODE TO NICKEL RECLAMATION PROCESS FOR ELECTROLESS NICKEL PLATING SPENT SOLUTIONS](#)
- F006: [CLASSIFICATION OF WASTEWATER TREATMENT SLUDGE FROM THE REVISED "ZINC-COBALT ALLOY PLATING ON CARBON STEEL" PROCESS](#)
- F006: [REGULATORY INTERPRETATION FOR ION EXCHANGE RESIN USED FOR WATER REUSE ON ELECTROPLATING WASTEWATERS](#)
- F006: [REGULATORY INTERPRETATION REGARDING PHOTORESIST SOLIDS \("SKINS"\) GENERATED IN THE PRINTED CIRCUIT BOARD MANUFACTURING INDUSTRY](#)
- F006: [REQUEST FOR ASSISTANCE REGARDING F006 DETERMINATION AT THE EAGLE-PICHER COLORADO SPRINGS, COLORADO FACILITY](#)
- F006: [CHEMICAL ETCHING PROCESS-HAZARDOUS WASTE IDENTIFICATION](#)
- F006: [WASTEWATER TREATMENT SLUDGES RESULTING FROM METAL CLEANING PROCESS](#)
- F006: [GENERATOR TREATMENT OF F006 ELECTROPLATING SLUDGE](#)
- F006: [F006 LISTING FOR PICKLING AND ETCHING WASTES AND DELISTING ISSUES](#)
- F006: [INTERPRETATION OF THE F006 LISTING RELATIVE TO COLLIS, INC., CLINTON, IOWA](#)
- F006: [WASTES FROM BRIGHT DIPPING UNDER THE REINTERPRETED F006 LISTING](#)
- F006: [F006 LISTING DOES NOT INCLUDE ZINC PHOSPHATING WASTEWATER TREATMENT SLUDGES](#)
- F006: [ELECTROLESS ZINC PLATING WASTE NOT IN F006 LISTING](#)
- F006: [F006 LISTING APPLIED TO PRINTING INDUSTRY](#)
- F006: [WASTES FROM ZINC PLATING \(SEGREGATED BASIS\) ON CARBON STEEL EXCLUDED FROM F006](#)
- F006: [SPENT ION EXCHANGE RESINS AND FILTER AS HAZARDOUS WASTE](#)
- F006: [APPLICABILITY OF F006 LISTING TO BRIGHT-DIPPING OPERATIONS](#)
- F006: [WASTES FROM ELECTROSTATIC WATERFALL CURTAIN PAINTING OPERATIONS](#)
- F006: [ELECTROCHEMICAL MACHINING WASTES AND THE SCOPE OF THE F006 LISTING](#)
- F006: [WASTE LISTINGS F006 AND K062, SCOPE OF](#)
- F006: [HEAT TREATING OPERATIONS AND THE F006 LISTING](#)
- F006: [SPENT ION EXCHANGE RESIN](#)
- F006: [APPLICABILITY OF F006 V. K062 TO GALVANIZING WASTES](#)
- F006: [WASTEWATER TREATMENT EFFLUENT FROM PROCESSES THAT GENERATE K001 AND F006 WASTEWATER TREATMENT SLUDGE](#)
- F006: [MECHANICAL PLATING WASTES IN THE F006 LISTING, NON-INCLUSION OF](#)
- F006: [REGULATORY STATUS OF WASTEWATER TREATMENT SLUDGES FROM ALUMINUM AND COPPER FINISHING](#)

- F006 – F009: [TANK TREATMENT PROCESSES](#)
- F006 – F009: [IMMERSION PLATING WASTEWATERS-BRONZE PLATING](#)
- F006 – F009: [METAL FINISHING SLUDGES](#)
- F006 & F009: [F009 LISTING AND THE MIXTURE RULE TO ELECTROPLATING RINSEWATERS AND RESINS; ELECTROPLATING RINSEWATERS](#)
- F006, F007, & F009: [REGULATORY STATUS OF ELECTROPLATING RINSEWATER CONTAINING CYANIDES](#)
- F006, F012, & F019: [SLUDGES FROM WASTEWATER MIXTURES](#)
- F007: [DRAGOUT FROM F007 - SPENT CYANIDE PLATING BATH SOLUTIONS](#)
- F007: [SPENT CYANIDE PLATING BATH SOLUTIONS FROM SILVER RECOVERY](#)
- F007 – F009: [ELECTROPLATING WASTES](#)
- F007 – F009: [ELECTROPLATING RINSEWATERS NOT IN F007-009 LISTINGS](#)
- F009: [WASTE FROM CHEMICAL ETCHING USING CYANIDE](#)
- F010 – F012: [CYANIDE-SALT CONTAINING WASTES IN METAL HEAT TREATING OPERATIONS](#)
- F019: [CHEMICAL CONVERSION OF ALUMINUM AND WHETHER WASTEWATER TREATMENT SLUDGE GENERATED IS CONSIDERED AN F019 HAZARDOUS WASTE](#)
- F019: [PETITION FOR EXCLUSION OF WESTERN WHEEL HOWELL F019 WASTE](#)
- F019: [REQUEST FOR CLARIFICATION ON F019 WASTE DETERMINATION](#)
- F019: [DELISTING PETITION - FUJI PHOTO FILM WASTEWATER TREATMENT SLUDGE](#)
- F019: [APPLICABILITY OF F019 LISTING TO WASTEWATER TREATMENT SLUDGE FROM THE TIN COATING OF ALUMINUM](#)
- F019: [ZIRCONIUM PHOSPHATING SLUDGES EXEMPTION](#)
- F019: [MARTIN MARIETTA - F019 WASTE LISTING DETERMINATION](#)
- F019: [WASTEWATER TREATMENT SLUDGE EXEMPTION FOR ANODIZING OF ALUMINUM](#)
- [INDUSTRIAL PLATING OPERATIONS, STATUS OF VARIOUS WASTES FROM](#)
- [APPLICABILITY OF SOLVENT AND ELECTROPLATING LISTINGS](#)
- F019: [DETERMINATION ON ZIRCONIUM OXIDE COATING PROCESS AS ALUMINUM AND THE F019 LISTING](#)

Fact Sheets and Q&As

- FACT SHEET (F006): [ENVIRONMENTAL FACT SHEET: FINAL RULE PROMOTES METALS RECOVERY FROM WASTE WATER TREATMENT SLUDGE \(F006\)](#)
- FACT SHEET (F006): [ENVIRONMENTAL FACT SHEET: CERTAIN HAZARDOUS WASTE SLAG USES NOW SUBJECT TO REGULATION](#)
- FACT SHEET (F019): [ENVIRONMENTAL FACT SHEET; LISTING AMENDMENT FOR F019 WASTEWATER TREATMENT SLUDGES](#)
- Q&A (F006): [AIR EMISSIONS FROM ELECTROPLATING OPERATIONS](#)
- Q&A (F006): [F006](#)
- Q&A (F006): [STORAGE OF WASTEWATER TREATMENT SLUDGE](#)
- Q&A (F006): [WASTEWATER TREATMENT SLUDGE FROM ETCHING SEMICONDUCTOR SILICON WAFERS](#)
- Q&A (F006 – F009): [CLARIFICATION OF ELECTROPLATING LISTINGS](#)
- Q&A (F007 & F009): [CONTAMINATED ELECTROPLATING RINSEWATERS](#)
- Q&A (F009): [APPLICABILITY OF F009 LISTING TO CLEANING TANK SLUDGE](#)
- Q&A (F009): [CLARIFICATION OF THE F009 LISTING](#)
- Q&A (F019): [CLARIFICATION OF F019 LISTING AND APPLICABILITY TO OTHER WASTEWATER TREATMENT SLUDGES](#)

Dioxin bearing wastes (F020 - F023, and F026 – F028)

F020.....	Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).
F021.....	Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.
F022.....	Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.
F023.....	Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as

	a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).
F026.....	Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.
F027.....	Discarded unused (H) formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).
F028.....	Residues resulting from (T) the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

Related Resources for F020 – F023 and F026 – F028 Wastes:

Federal Register Notice(s)

- Proposed Rule (F020-F023 and F026-F028)
[48 FR 14514; April 4, 1983](#)
- Final Rule (F020-F023 and F026-F028)
[50 FR 1978; January 14, 1985](#)

Letters/Memoranda

- F020: [REFRACTORY WASTES AT U.S. EPA COMBUSTION RESEARCH FACILITY](#)
- F020 & F023: [WASTES COVERED UNDER THE DIOXIN LISTING](#)
- F020 – F023, F026 & F027: [LABORATORY WASTES \(INCLUDING CARCASSES, BEDDING, CAGES\) CONTAINING DIOXIN](#)
- F020 – F023 and F026 – F028: [CLARIFICATION ON WHAT CONSTITUTES DIOXIN RELATED MATERIALS](#)
- F020 – F023 and F026 – F028: [INCINERATION OF LABORATORY WASTES CONTAMINATED WITH TCDD](#)
- F020 – F023 and F026 – F028: [IMPLEMENTATION OF DIOXIN LISTING REGULATION](#)
- F020 – F023, F026, and F028: [DIOXIN STANDARD USED TO TEST GAS CHROMATOGRAPHY COLUMNS, HANDLING OF](#)
- F021: [WASTEWATERS EXCLUSION FROM THE DEFINITION OF F021 FOR PCP MANUFACTURE](#)
- F021: [REGULATORY STATUS OF HYDROCHLORIC ACID CO-PRODUCT FROM PENTACHLOROPHENOL PRODUCTION](#)
- F021 & F027: [F021 LISTING FOR SUBSTANCES CONTAINING CHLOROPHENOLIC COMPOUNDS](#)
- F021 & F027: [REGULATORY STATUS OF VARIOUS TYPES OF PENTACHLOROPHENOL WASTES](#)
- F023: [CHLORINATED DIOXIN WASTES \(F023\)](#)
- F027: [F027 LISTING - USED AND UNUSED FORMULATIONS IN WOOD PRESERVING](#)
- F027: [SOIL CONTAMINATED WITH USED AND UNUSED PESTICIDES; SOIL CONTAMINATED WITH PESTICIDE](#)
- F027: [REGULATORY STATUS OF USED WOOD PRESERVATION CONTAINING PENTACHLOROPHENOL \(PCP\)](#)
- F027: [SPENT CARBON USED TO REMOVE DISSOLVED PENTACHLOROPHENOL \(PCP\) FROM GROUNDWATER](#)
- [DIOXIN IN WASTES FROM WOOD PRESERVING PROCESSES USING PENTACHLOROPHENOL](#)
- [FEDERAL POLICY REGARDING DIOXIN DISPOSAL](#)

Fact Sheets and Q&As

- Q&A (F027): [UNUSED FORMULATIONS CONTAINING SODIUM PENTACHLOROPHENATE ARE F027](#)
- Q&A (F027): [UNUSED FORMULATIONS OF AGENT ORANGE](#)

Wastes from production of certain chlorinated aliphatic hydrocarbons (F024 and F025)

F024.....	Process wastes, including (T) but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.31 or § 261.32.).
F025.....	Condensed light ends, (T) spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

Related Resources for F024 and F025 Wastes:

Federal Register Notice(s)

- Proposed Rule (F024-F025)
[49 FR 5313; February 10, 1984](#)

- Final Rule (F024-F025)
[54 FR 50968; December 11, 1989](#)

Wastes from wood preserving (F032, F034 and F035)

F032.....	Wastewaters (except those (T) that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F034.....	Wastewaters (except those (T) that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote

	formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F035.....	Wastewaters (except those (T) that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

Related Resources for F032, F034 and F035 Wastes:

Federal Register Notice(s)

- Proposed Rule (F032–F035)
[53 FR 53282; December 30, 1988](#)
- Final Rule (F032 and F034–F035)
[55 FR 50450; December 6, 1990](#)

Letters/Memoranda

- F032: [CLARIFICATION OF WOOD SURFACE PROTECTION AND WOOD PRESERVING DEFINITIONS](#)
- F032: [CLARIFICATION OF HAZARDOUS WASTE LISTINGS PERTAINING TO WOOD PRESERVING OPERATIONS](#)
- F032, F034, and F035: [SCOPE AND APPLICABILITY OF RCRA REGULATIONS AT WOOD PRESERVING FACILITIES](#)
- F032, F034, and F035: [CLARIFICATION OF REQUIREMENTS INVOLVING THE COUNTING OF WOOD PRESERVING WATERS FOR BIENNIAL REPORTING](#)
- F032, F034, and F035: [REGULATORY STATUS OF WOOD STICKERS USED FOR WOOD PRESERVING OPERATIONS](#)
- F032, F034, and F035: [DRIPPAGE IN WOOD PRESERVING STORAGE YARDS](#)

Fact Sheets and Q&As

- Q&A (F032, F034, and F035): [RECLAIMED SPENT WOOD PRESERVATIVE EXCLUSION IN 40 CFR §261.4\(A\)\(9\)](#)
- Q&A (F032, F034, and F035): [ADMINISTRATIVE STAY FOR WOOD PRESERVING WASTES](#)

Petroleum refinery wastewater treatment sludges (F037 - F038)

F037..... Petroleum refinery (T)
primary oil/water/solids
separation sludge_Any
sludge generated from
the gravitational
separation of oil/water/
solids during the
storage or treatment of
process wastewaters and
oil cooling wastewaters
from petroleum
refineries. Such sludges
include, but are not
limited to, those
generated in oil/water/
solids separators; tanks
and impoundments;
ditches and other
conveyances; sumps; and
stormwater units
receiving dry weather
flow. Sludge generated
in stormwater units that
do not receive dry
weather flow, sludges
generated from non-
contact once-through
cooling waters
segregated for treatment
from other process or
oily cooling waters,
sludges generated in
aggressive biological
treatment units as
defined in §
261.31(b)(2) (including
sludges generated in one
or more additional units
after wastewaters have
been treated in
aggressive biological
treatment units) and
K051 wastes are not
included in this
listing. This listing

	does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under § 261.4(a)(12)(i), if those residuals are to be disposed of..
F038.....	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge_Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (T)

Related Resources for F037 and F038 Wastes:

Federal Register Notice(s)

- Proposed Rule (F037-F038)
[45 FR 74893; November 12, 1980](#)
- Final Rule (F037-F038)
[55 FR 46354; November 2, 1990](#)

Letters/Memoranda

- F037 & F038: [APPLICABILITY OF THE “MIXTURE” RULE TO PETROLEUM REFINERY WASTEWATER SYSTEMS](#)
- F037 & F038: [DRAFT REGION VIII POLICY ON “AGGRESSIVE BIOLOGICAL TREATMENT”](#)

Fact Sheets and Q&As

- Q&A (F037 & F038): [PETROLEUM REFINERY WASTEWATER TREATMENT SLUDGE CLASSIFICATION](#)

Multisource leachate (F039)

F039.....	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).	(T)
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Related Resources for F039 Wastes:

Federal Register Notice(s)

- Proposed Rule (F039); LDRs for third scheduled wastes
[54 FR 48372; November 22, 1989](#)
- Final Rule (F039); LDRs for third scheduled wastes
[55 FR 22520; June 1, 1990](#)

Letters/Memoranda

- F039: [WASTE MINIMIZATION REQUIREMENTS OF SECTION 3002\(B\) OF RCRA FOR HAZARDOUS WASTE DISPOSAL FACILITIES](#)
- F039: [CAPACITY VARIANCES FOR UNDERGROUND INJECTION FACILITIES](#)
- F039: [MULTI-SOURCE LEACHATE AND TREATMENT STANDARDS OF LAND DISPOSAL RESTRICTIONS](#)

Fact Sheets and Q&As

- Q&A (F039): [MULTISOURCE LEACHATE \(F039\) WASTE CODE AS IT APPLIES TO CONTAMINATION FROM SPILLS](#)
- Q&A (F039): [CLASSIFICATION OF LEACHATE CONTAMINATED GROUND WATER](#)

 *(I,T) should be used to specify mixtures that are ignitable and contain toxic constituents.

[NOTE: The following language is continuation of § 261.31]

(b) Listing Specific Definitions: (1) For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids. (2) (i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employ a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other onsite records, documents and data sufficient to prove that: (A) the unit is an aggressive biological treatment unit as defined in this subsection; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit.

(3) (i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing, (A) sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of

lateral particle movement and (B) floats are considered to be generated at the moment they are formed in the top of the unit.

[46 FR 4617, Jan. 16, 1981]

Editorial Note: For Federal Register citations affecting §261.31, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 261.32 Hazardous wastes from specific sources.

(a) The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under §§260.20 and 260.22 and listed in appendix IX.

Wood preservation (K001)

Industry and EPA hazardous Waste No.	Hazardous waste	Hazard code
Wood preservation: K001.....	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)

Related Resources for Wood Preservation Wastes:

Letters/Memoranda

- K001: [WOOD TREATED WITH CREOSOTE, DISPOSAL OF](#)
- K001: [K001-LISTED WASTES FROM WOOD PRESERVING PROCESSES](#)
- K001: [WASTEWATER TREATMENT EFFLUENT FROM PROCESSES THAT GENERATE K001 AND F006 WASTEWATER TREATMENT SLUDGE](#)
- K001: [CREOSOTE TREATED CROSS TIES, DISPOSAL OF, FIFRA INTERFACE](#)

Fact Sheets and Q&As

- Q&A (K001): [WASTEWATER FROM WOOD PRESERVING](#)

Inorganic pigment manufacturing (K002 – K008)

Inorganic pigments: K002.....	Wastewater treatment	(T)
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	sludge from the production of chrome yellow and orange pigments.	
K003.....	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004.....	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005.....	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006.....	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007.....	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008.....	Oven residue from the production of chrome oxide green pigments.	(T)

Organic chemicals manufacturing (K009 – K011, K013 – K030, K083, K085, K093 – K096, K103 – K105, K107 – K118, K136, K149 – K151, K156 – K159, K161, K174 – K175, and K181)

Organic chemicals:

K009.....	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010.....	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011.....	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013.....	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014.....	Bottoms from the acetonitrile purification column in	(T)

	the production of acrylonitrile.	
K015.....	Still bottoms from the distillation of benzyl chloride.	(T)
K016.....	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017.....	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018.....	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019.....	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020.....	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021.....	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022.....	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023.....	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024.....	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K025.....	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026.....	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027.....	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028.....	Spent catalyst from the hydrochlorinator reactor in the production of	(T)

K029.....	1,1,1-trichloroethane. Waste from the product steam stripper in the production of 1,1,1- trichloroethane.	(T)
K030.....	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083.....	Distillation bottoms from (T) aniline production.	
K085.....	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K093.....	Distillation light ends (T) from the production of phthalic anhydride from ortho-xylene.	
K094.....	Distillation bottoms from (T) the production of phthalic anhydride from ortho-xylene.	
K095.....	Distillation bottoms from (T) the production of 1,1,1- trichloroethane.	
K096.....	Heavy ends from the heavy (T) ends column from the production of 1,1,1- trichloroethane.	
K103.....	Process residues from (T) aniline extraction from the production of aniline.	
K104.....	Combined wastewater (T) streams generated from nitrobenzene/aniline production.	
K105.....	Separated aqueous stream (T) from the reactor product washing step in the production of chlorobenzenes.	
K107.....	Column bottoms from (C,T) product separation from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazines.	
K108.....	Condensed column (I,T) overheads from product separation and condensed reactor vent gases from the production of 1,1- dimethylhydrazine (UDMH)	

	from carboxylic acid hydrazides.	
K109.....	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110.....	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111.....	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112.....	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113.....	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114.....	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115.....	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116.....	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117.....	Wastewater from the reactor vent gas scrubber in the	(T)

	production of ethylene dibromide via bromination of ethene.	
K118.....	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136.....	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K149.....	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.).	(T)
K150.....	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151.....	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

K156.....	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K157.....	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K158.....	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K159.....	Organics from the treatment of thiocarbamate wastes.	(T)
K161.....	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.).	(R,T)
K174.....	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that	(T)

result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions:

(i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and

(iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill.

Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met.

K175..... Wastewater treatment sludges from the production of vinyl (T)

chloride monomer using mercuric chloride catalyst in an acetylene-based process.

K181.....Nonwastewaters from the production of dyes and/ or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of this section that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are:

(i) disposed in a Subtitle D landfill unit subject to the design criteria in § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of this section. Paragraph (d) of this section describes the process for demonstrating that a facility's nonwastewaters are not

K181. This listing does not apply to wastes that are otherwise identified as hazardous under §§ 261.21-261.24 and 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met.

Related Resources for Organic Chemical Wastes:

Federal Register Notice(s)

- Proposed Rule (K107-K110)
[49 FR 49556; December, 20, 1984](#)
- Supplement to Proposed Rule (K107-K110)
[54 FR 33942; August 17, 1989](#)
- Final Rule (K107-K110)
[55 FR 18496; May 2, 1990](#)
- Proposed Rule (K111 – K116)
[49 FR 19608; May 8, 1984](#)
- Final Rule (K111 – K116)
[50 FR 42936; October 23, 1985](#)
- Proposed Rule (K117 – K118)
[49 FR 44718; November 8, 1984](#)
- Final Rule (K117 – K118)
[51 FR 5327; February 13, 1986](#)
- Proposed Rule (K149-K151)
[56 FR 51592; October 11, 1991](#)
- Final Rule (K149-K151)
[57 FR 47376; October 15, 1992](#)
- Proposed Rule (K156-K161)
[59 FR 9808; March 1, 1994](#)
- Final Rule (K156-K161)
[60 FR 7824; February 9, 1995](#)
- Proposed Rule (K149-K151)
[56 FR 51592; October 11, 1991](#)
- Final Rule (K149-K151)
[57 FR 47376; October 15, 1992](#)
- Proposed Rule (K156-K161)
[59 FR 9808; March 1, 1994](#)
- Final Rule (K156-K161)

[60 FR 7824; February 9, 1995](#)

- Interpretive Rule (K156 &K157)
[Carbamate Listing 60FR 41817; August 14, 1995.](#)
- Listings for wastes from production of chlorinated aliphatics (K174-K175)
[Rulemaking Information for K174-K175](#)
- Final Rule (K174 & K175)
[65 FR 67068, November 8, 2000](#)
- Listing for waste from production of certain dyes and pigments (K181)
[Rulemaking Information for K181](#)
- Final Rule (K181)
[70 FR 9138, February 24. 2005](#)

Letters/Memoranda

- K021: [APPLICABILITY OF K021 LISTING](#)
- K022: [DISTILLATION BOTTOM TARS AS K022 WASTE](#)
- K085: [THERMAL OXIDIZER AND HYDRODECHLORINATION PROCESS BY-PRODUCT K-WASTES](#)
- K156: [HAZARDOUS WASTE LISTING DETERMINATION \(60 FR 7825, FEBRUARY 9, 1995\) OF K156 WASTE FROM THE PRODUCTION OF METHYL CARBAMATE](#)
- K157: [EPA'S INTERPRETATION OF THE EXEMPTION IN 40 CFR 261.3\(A\)\(2\)\(IV\)\(F\), A NEW SECTION OF EPA'S REGULATIONS ON CARBAMATE LISTING RULE](#)
- K157: [THE MIXTURE RULE EXEMPTION FOR CARBAMATE WASTE](#)
- K161: [DITHIOCARBAMATE PRODUCTION AND SCOPE OF K171](#)

Fact Sheets and Q&As

- FACT SHEET (K174 & K175): [CHLORINATED ALIPHATICS PRODUCTION WASTES](#)
- FACT SHEET (K181): [WASTE FROM THE PRODUCTION OF DYES AND PIGMENTS LISTED AS HAZARDOUS](#)
- Q&A (K105): [WASTES LISTED FOR CONTAINING CHLORINATED BENZENES](#)
- Q&A (K111): [HAZARDOUS WASTE IDENTIFICATION - K111 LISTING](#)
- Q&A (K181): [WHAT WASTES FROM THE PRODUCTION OF DYES AND PIGMENTS ARE COVERED BY THE K181 LISTING?](#)
- Q&A (K181): [WHAT EXEMPTIONS ARE INCLUDED IN THE DYES AND PIGMENTS LISTING?](#)
- Q&A (K181): [HOW CAN WASTE GENERATORS DEMONSTRATE THAT THEIR DYES AND PIGMENT WASTES ARE NOT HAZARDOUS?](#)

Inorganic chemicals manufacturing (K071, K073, K106, and K176 – K178)

Inorganic chemicals:

K071.....	Brine purification muds from the mercury cell process in chlorine	(T)
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	production, where separately prepurified brine is not used.	
K073.....	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106.....	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
K176.....	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(E)
K177.....	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(T)
K178.....	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	(T)

Related Resources for Inorganic Chemical Wastes:

Federal Register Notice(s)

- Listings for wastes from production of inorganic chemicals (K176-K178)
[Rulemaking Information for K176-K178](#)
- Final rule for (K176- K178)
[66 FR 58257; November 20, 2001](#)

Fact Sheets and Q&As

- FACT SHEET (K176, K177, & K178): [THREE INORGANIC CHEMICALS NOW LISTED AS HAZARDOUS WASTE](#)
- OTHER INFORMATION FOR K176, K177, & K178 (EPA WEB SITE)
<http://www.epa.gov/wastes/hazard/wastetypes/wasteid/inorgchem/index.htm>

Pesticides manufacturing (K031 – K043, K097 – K099, K123 – K126, and K131 – K132)

Pesticides:

K031.....	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032.....	Wastewater treatment sludge from the production of chlordane.	(T)
K033.....	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034.....	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K035.....	Wastewater treatment sludges generated in the production of creosote.	(T)
K036.....	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037.....	Wastewater treatment sludges from the production of disulfoton.	(T)
K038.....	Wastewater from the washing and stripping of phorate production.	(T)
K039.....	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040.....	Wastewater treatment sludge from the production of phorate.	(T)

K041.....	Wastewater treatment sludge from the production of toxaphene.	(T)
K042.....	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5- T.	(T)
K043.....	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K097.....	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K098.....	Untreated process wastewater from the production of toxaphene.	(T)
K099.....	Untreated wastewater from the production of 2,4-D.	(T)
K123.....	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbami c acid and its salt.	(T)
K124.....	Reactor vent scrubber water from the production of ethylenebisdithiocarbami c acid and its salts.	(C, T)
K125.....	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbami c acid and its salts.	(T)
K126.....	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbami c acid and its salts.	(T)
K131.....	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132.....	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)

Related Resources for Pesticide Wastes:

Federal Register Notice(s)

- Proposed Rule (K123-K126)
[49 FR 49562; December 20, 1984](#)
- Final Rule (K123-K126)
[51 FR 37725; October 24, 1986](#)
- Proposed Rule (K131-K132)
[50 FR 16432; April 25, 1985](#)
- Final Rule (K131-K132)
[54 FR 41402; October 6, 1989](#)

Explosives manufacturing (K044 – K047)

Explosives:

K044.....	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045.....	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046.....	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047.....	Pink/red water from TNT operations.	(R)

Related Resources for Explosive Wastes:

Letters/Memoranda

- K044: [GENERATION AND TREATMENT OF K044 WASTE](#)
- K047: [APPLICABILITY OF 40 CFR 261.5 TO K047](#)

Fact Sheets and Q&As

- Q&A (K047): [REMEDIATION OF TNT-CONTAMINATED SOIL](#)

Petroleum refining (K048 – K052, and K169 – K172)

Petroleum refining:

K048.....	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049.....	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050.....	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051.....	API separator sludge from the petroleum refining industry.	(T)
K052.....	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169.....	Crude oil storage tank sediment from petroleum refining operations.	(T)
K170.....	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations.	(T)
K171.....	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I,T)
K172.....	Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I,T)

Related Resources for Petroleum Refining Wastes:

Federal Register Notice(s)

- Listings for petroleum refining process wastes (K169-K172)
[Rulemaking Information for K169-K172](#)

Letters/Memoranda

- K048: [SECONDARY SLUDGES FROM BIOLOGICAL TREATMENT OF REFINERY WASTEWATERS](#)
- K048, K049, AND K051: [REFINERY WASTEWATER](#)
- K048 – K052: [K-WASTE FILTER CAKE IN THE MANUFACTURE OF CEMENT](#)
- K049: [INTERPRETATION OF RCRA HAZARDOUS WASTE DEFINITION FOR SLOP OIL EMULSION SOLIDS](#)
- K049: [OIL/WATER EMULSIONS GENERATED BY PETROLEUM REFINERY WW SYSTEMS-K049 WASTE](#)
- K049 & K051: [LIME SLUDGE IMPOUNDMENT SLUDGE, DELISTING OF](#)
- K050: [REGULATORY REQUIREMENTS FOR TANKS, VEHICLES, VESSELS, PROCESS OR MANUFACTURING UNITS, OR PIPELINES WHICH HAVE BEEN SHUT DOWN](#)
- K051: [PETROLEUM FACILITIES INCLUDED IN THE K051 LISTING FOR API SEPARATOR SLUDGE](#)
- K051 & K052: [SCOPE OF THE K051 AND K052 LISTINGS](#)
- K052: [ARE TANK BOTTOMS REMOVED FROM TANKS CONTAINING ONLY NAPHTHA DEEMED TO BE K052 HAZARDOUS WASTE?](#)
- K052: [TEL GASOLINE SLUDGE DISPOSAL](#)
- K052: [K052 LISTING FOR WASTES GENERATED BY PETROLEUM INDUSTRY](#)
- [RECLAMATION OF MATERIAL RECOVERED FROM CRUDE OIL STORAGE TANKS](#)
- K171: [REQUEST FOR CLARIFICATION OF ISSUES RAISED BY EPA'S NOVEMBER 29, 1999 MEMO ON THE "PETROLEUM REFINERY RESIDUAL LISTINGS/ SOLID WASTE DEFINITION EXCLUSION RULE" \(63 FR 42110, AUGUST 6, 1998\)](#)
- K171: [REQUEST FOR CLARIFICATION, SPENT CATALYSTS FROM MOTIVA ENTERPRISES LLC, CONVENT REFINERY H-OIL UNIT](#)
- K171 & K172: [REGULATORY STATUS OF OIL-BEARING SECONDARY MATERIALS UNDER RCRA](#)
- K171 & K172: [REUSE OF REGENERATED HYDROPROCESSING CATALYSTS](#)
- K171 & K172: [SPENT CATALYSTS FROM PETROLEUM REFINING DUAL PROCESS REACTORS](#)
- K171 & K172: [SPENT CATALYSTS FROM PETROLEUM REFINING DUAL PROCESS UNITS](#)
- K171 & K172: [SPENT CATALYSTS FROM PETROLEUM REFINING HYDROCRACKING PROCESSES](#)

Fact Sheets and Q&As

- Q&A (K051): [API SEPARATOR SLUDGE, EXCLUSION OF WATER FRACTION FROM K051 LISTING](#)
- Q&A (K051): [K051 AND HSWA; K051 SLUDGE RE-USED ON-SITE, EXEMPTION](#)
- Q&A (K051): [API SEPARATOR WASTEWATER AND SLUDGE](#)
- Q&A (K051): [EFFLUENT FROM API SEPARATOR](#)
- Q&A (K052): [APPLICABILITY OF K052 WASTE CODE TO PIPELINE TERMINALS](#)
- Q&A (K052): [K052: BOTTOMS FROM TANKS STORING LEADED GASOLINE AT PETROLEUM REFINERIES](#)

Iron and steel production (K061 and K062)

Iron and steel:
K061..... Emission control dust/ (T)

	sludge from the primary production of steel in electric furnaces.	
K062.....	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)

Related Resources for Iron and Steel Wastes:

Federal Register Notice(s)

- Federal Register notice narrowing the scope of the K062 listing
[52 FR 28697; August 3, 1987](#)
- Proposed generic exclusion levels for HTMR slag residues derived from K061
[56 FR 41164; August 19, 1991](#)
- Final generic exclusion levels for HTMR slag residues derived from K061, K062, and F006
[57 FR 37194; August 18, 1992](#)
- Proposed Rule prohibiting non-encapsulated uses of HTMR slag residues derived from K061, K062, and F006
[59 FR 8583; February 23, 1994](#)
- Final Rule prohibiting anti-skid use of HTMR slag residues derived from K061, K062, and F006
[59 FR 43496; August 24, 1994](#)

Letters/Memoranda

- K061: [NEW JERSEY ZINC COMPANY K061 STORAGE PILE](#)
- K061: [STATUS OF ELECTRIC ARC FURNACE DUST INCORPORATED INTO GLASS FRIT](#)
- K061: [STAINLESS STEEL PRODUCTION RESIDUES](#)
- K061: [BRIQUETTING OF FLUE DUST \(K061\) FOR STEEL PRODUCTION](#)
- K061: [ELECTRIC ARC FURNACE DUST AFTER ENCAPSULATION TREATMENT PROCESS](#)
- K061: [COMMERCIAL FERTILIZER THAT CONTAINS K061 WASTE](#)
- K061: [EXEMPTION FOR COMMERCIAL FERTILIZERS ONCE THE FERTILIZER IS PRODUCED](#)
- K061: [PRIMARY AND SECONDARY PRODUCTION OF STEEL IN ELECTRIC ARC FURNACES](#)
- K061: [EMISSION CONTROL DUST/SLUDGE FROM ELECTRIC ARC FURNACE AT FOUNDRY NOT A K061 WASTE](#)
- K061: [K061, EMISSION CONTROL DUST/SLUDGE FROM PRODUCTION OF STEEL IN ELECTRIC FURNACES](#)
- K062: [K062 LISTING APPLIES ONLY TO FACILITIES WITHIN THE IRON AND STEEL INDUSTRY](#)
- K062: [WASTE LISTINGS F006 AND K062, SCOPE OF](#)
- K062: [SPENT PICKLE LIQUOR CORROSIVITY](#)

- K062: [REGULATORY STATUS OF LIME-STABILIZED WASTE PICKLE LIQUOR SLUDGE](#)
- K062: [PICKLE LIQUOR RECOVERY UNIT AS AN INDUSTRIAL FURNACE](#)
- K062: [SUPERNATANT FORMED IN LIME STABILIZATION OF WASTE PICKLE LIQUOR AS HAZARDOUS WASTE](#)
- K062: [LIME STABILIZED WASTE PICKLE LIQUOR SLUDGE EXCLUSION](#)
- K062: [LIME-STABILIZED WASTE PICKLE LIQUOR SLUDGE EXEMPTION FOR LIME-AMMONIA STABILIZED IRON OXIDE SLUDGE](#)
- K062: [SPENT PICKLE LIQUOR, DEFINITION AS HAZARDOUS](#)
- K062: [SPENT PICKLE LIQUOR, REUSE OF](#)
- K062: [MIXTURES OF PICKLE LIQUOR AND OTHER WASTES AND THE LIME STABILIZED WASTE PICKLE LIQUOR SLUDGE EXEMPTION](#)
- K062: [SPENT PICKLE LIQUOR FINAL RULE REGARDING SCOPE OF THE K062 LISTING, CORRECTION NOTICE](#)

Fact Sheets and Q&As

- Q&A (K061): [K061 WASTE](#)
- Q&A (K061): [BAGHOUSE DUST GENERATED FROM REMELTING PRIMARY PRODUCED STEEL](#)
- Q&A (K062): [PICKLING BATH CARRYOVER AND K062](#)

Primary aluminum production (K088)

Primary aluminum:

K088..... Spent potliners from primary aluminum reduction. (T)

Related Resources for Primary Aluminum Wastes:

Letters/Memoranda

- K088: [CLARIFICATION ON THE SCOPE OF K088](#)
- K088: [CLARIFICATION OF THE SCOPE OF THE K088 LISTING](#)

Secondary lead processing (K069 and K100)

Ferroalloys:

Secondary lead:

K069..... Emission control dust/ sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will

	remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register).
K100.....	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)

Related Resources for Secondary Lead Wastes:

Federal Register Notice(s)

- K069 Administrative Stay Notice
[56 FR 19951; May 1, 1991](#)

Letters/Memoranda

- K069: [CLARIFICATION ABOUT THE SCOPE OF EPA'S ADMINISTRATIVE STAY FOR A PORTION OF THE K069 HAZARDOUS WASTE LISTING](#)
- K069: [REGULATORY STATUS OF RESIDUES FROM SECONDARY LEAD SMELTERS THAT RECYCLE K069 WASTES; RESIDUES FROM SECONDARY LEAD SMELTERS THAT RECYCLE K069 WASTES](#)

Veterinary pharmaceuticals manufacturing (K084 and K101 – K102)

Veterinary pharmaceuticals:

K084.....	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K101.....	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K102.....	Residue from the use of activated carbon for decolorization in the

production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Ink formulation (K086)

Ink formulation:

K086.....	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
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Related Resources for Secondary Ink Formulation Wastes:

Letters/Memoranda

- K086: [INK FORMULATION WASTES AS BOTH K086 AND F001-005 WASTES](#)

Fact Sheets and Q&As

- Q&A (K086): [DYES USED IN INK FORMULATION \(K086\)](#)

Coking (K060, K141 – K145, and K147-K148)

Coking:

K060.....	Ammonia still lime sludge from coking operations.	(T)
K087.....	Decanter tank tar sludge from coking operations.	(T)
K141.....	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar	(T)

	sludges from coking operations).
K142.....	Tar storage tank residues (T) from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143.....	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144.....	Wastewater sump residues (T) from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
K145.....	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147.....	Tar storage tank residues (T) from coal tar refining.
K148.....	Residues from coal tar distillation, including but not limited to, still bottoms.

Note: EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148 are not solid wastes under RCRA, provided they are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. See [261.4\(a\)\(10\)](#).

Related Resources for Coking Wastes:

Federal Register Notice(s)

- Proposed Rule (K141-K145 and K147-K148)
[56 FR 35758; July 26, 1991](#)
- Final Rule (K141-K145 and K147-K148)
[57 FR 37284; August 18, 1992](#)

Letters/Memoranda

- K147 & K148: [REGULATORY STATUS OF CENTRIFUGE UNDERFLOW WASTES](#)

[NOTE: The following language is continuation of § 261.32]

(b) *Listing Specific Definitions:* (1) For the purposes of the K181 listing, dyes and/or pigments production is defined to include manufacture of the following product classes: dyes, pigments, or FDA certified colors that are classified as azo, triarylmethane, perylene or anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes and/or pigments manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes and/or pigments, are not included in the K181 listing.

(c) *K181 Listing Levels.* Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 listing, unless the conditions in the K181 listing are met.

Constituent	Chemical abstracts No.	Mass levels (kg/yr)
Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

(d) *Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181.* The procedures described in paragraphs (d)(1)–(d)(3) and (d)(5) of this section establish when nonwastewaters from the production of dyes/pigments would not be hazardous (these procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in paragraph (a) of this section). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in paragraph (a) of this section, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator must maintain documentation as described in paragraph (d)(4) of this section.

(1) *Determination based on no K181 constituents.* Generators that have knowledge (e.g., knowledge of constituents in wastes based on prior sampling and analysis data and/or

information about raw materials used, production processes used, and reaction and degradation products formed) that their wastes contain none of the K181 constituents (*see* paragraph (c) of this section) can use their knowledge to determine that their waste is not K181. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

(2) *Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents.* If the total annual quantity of dyes and/or pigment nonwastewaters generated is 1,000 metric tons or less, the generator can use knowledge of the wastes (e.g., knowledge of constituents in wastes based on prior analytical data and/or information about raw materials used, production processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of paragraph (c) of this section. To make this determination, the generator must:

- (i) Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.
- (ii) Track the actual quantity of nonwastewaters generated from January 1 through December 31 of each year. If, at any time within the year, the actual waste quantity exceeds 1,000 metric tons, the generator must comply with the requirements of paragraph (d)(3) of this section for the remainder of the year.
- (iii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.
- (iv) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:
 - (A) The quantity of dyes and/or pigment nonwastewaters generated.
 - (B) The relevant process information used.
 - (C) The calculations performed to determine annual total mass loadings for each K181 constituent in the nonwastewaters during the year.

(3) *Determination for generated quantities greater than 1,000 MT/yr for wastes that contain K181 constituents.* If the total annual quantity of dyes and/or pigment nonwastewaters generated is greater than 1,000 metric tons, the generator must perform all of the steps described in paragraphs ((d)(3)(i)–(d)(3)(xi) of this section) in order to make a determination that its waste is not K181.

- (i) Determine which K181 constituents (see paragraph (c) of this section) are reasonably expected to be present in the wastes based on knowledge of the wastes (e.g., based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed).

(ii) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge, the generator must comply with the procedures for using knowledge described in paragraph (d)(2) of this section and keep the records described in paragraph (d)(2)(iv) of this section. For determinations based on sampling and analysis, the generator must comply with the sampling and analysis and recordkeeping requirements described below in this section.

(iii) Develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan must include:

- (A) A discussion of the number of samples needed to characterize the wastes fully;
- (B) The planned sample collection method to obtain representative waste samples;
- (C) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes.
- (D) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods.

(iv) Collect and analyze samples in accordance with the waste sampling and analysis plan.

(A) The sampling and analysis must be unbiased, precise, and representative of the wastes.

(B) The analytical measurements must be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of paragraph (c) of this section.

(v) Record the analytical results.

(vi) Record the waste quantity represented by the sampling and analysis results.

(vii) Calculate constituent-specific mass loadings (product of concentrations and waste quantity).

(viii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.

(ix) Determine whether the mass of any of the K181 constituents listed in paragraph (c) of this section generated between January 1 and December 31 of any year is below the K181 listing levels.

(x) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

- (A) The sampling and analysis plan.
- (B) The sampling and analysis results (including QA/QC data)
- (C) The quantity of dyes and/or pigment nonwastewaters generated.
- (D) The calculations performed to determine annual mass loadings.

(xi) Nonhazardous waste determinations must be conducted annually to verify that the wastes remain nonhazardous.

- (A) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.
- (B) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.
- (C) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change must be retained.

(4) *Recordkeeping for the landfill disposal and combustion exemptions.* For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator must maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.

(5) *Waste holding and handling.* During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the subtitle C requirements during the interim period, the generator could be subject to an enforcement action for improper management.

[46 FR 4618, Jan. 16, 1981]

Editorial Note: For Federal Register citations affecting §261.32, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in § 261.2 (a)(2)(i), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

- (a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section.
- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.
- (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section, unless the container is empty as defined in § 261.7 (b) of this chapter.

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, EPA considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

- (d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

[Comment: The phrase “commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . .” refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material,

such as a manufacturing process waste, that contains any of the substances listed in paragraph (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraph (e) or (f), such waste will be listed in either § 261.31 or § 261.32 or will be identified as a hazardous waste by the characteristics set forth in subpart C of this part.]

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in § 261.5(e).

[*Comment:* For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Hazardous Waste Number.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium

P010	7778-39-4	Arsenic acid H ₃ AsO ₄
P012	1327-53-3	Arsenic oxide As ₂ O ₃
P011	1303-28-2	Arsenic oxide As ₂ O ₅
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1).
P001	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P189	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester.

P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H- pyrazol-3-yl ester.
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester.
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester.
P127	1563-66-2	Carbofuran.
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan.
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate.
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro- 1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-

P060	465–73–6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro- 1,4,4a,5,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60–57–1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,6alpha,7beta, 7alpha)-
P051	¹ 72–20–8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7alpha)-, & metabolites
P044	60–51–5	Dimethoate
P046	122–09–8	alpha,alpha-Dimethylphenethylamine
P191	644–64–4	Dimetilan.
P047	¹ 534–52–1	4,6-Dinitro-o-cresol, & salts
P048	51–28–5	2,4-Dinitrophenol
P020	88–85–7	Dinoseb
P085	152–16–9	Diphosphoramido, octamethyl-
P111	107–49–3	Diphosphoric acid, tetraethyl ester
P039	298–04–4	Disulfoton
P049	541–53–7	Dithiobiuret
P185	26419–73–8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime.
P050	115–29–7	Endosulfan
P088	145–73–3	Endothall
P051	72–20–8	Endrin
P051	72–20–8	Endrin, & metabolites
P042	51–43–4	Epinephrine
P031	460–19–5	Ethanedinitrile
P194	23135–22–0	Ethanimidothioic acid, 2-(dimethylamino)-N-[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester.
P066	16752–77–5	Ethanimidothioic acid, N-[(methylamino)carbonyl]oxy]-, methyl ester
P101	107–12–0	Ethyl cyanide
P054	151–56–4	Ethyleneimine

P097	52–85–7	Famphur
P056	7782–41–4	Fluorine
P057	640–19–7	Fluoroacetamide
P058	62–74–8	Fluoroacetic acid, sodium salt
P198	23422–53–9	Formetanate hydrochloride.
P197	17702–57–7	Formparanate.
P065	628–86–4	Fulminic acid, mercury(2+) salt (R,T)
P059	76–44–8	Heptachlor
P062	757–58–4	Hexaethyl tetraphosphate
P116	79–19–6	Hydrazinecarbothioamide
P068	60–34–4	Hydrazine, methyl-
P063	74–90–8	Hydrocyanic acid
P063	74–90–8	Hydrogen cyanide
P096	7803–51–2	Hydrogen phosphide
P060	465–73–6	Isodrin
P192	119–38–0	Isolan.
P202	64–00–6	3-Isopropylphenyl N-methylcarbamate.
P007	2763–96–4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339–36–3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339–36–3	Manganese dimethyldithiocarbamate.
P092	62–38–4	Mercury, (acetato-O)phenyl-
P065	628–86–4	Mercury fulminate (R,T)
P082	62–75–9	Methanamine, N-methyl-N-nitroso-
P064	624–83–9	Methane, isocyanato-
P016	542–88–1	Methane, oxybis[chloro-
P112	509–14–8	Methane, tetranitro- (R)
P118	75–70–7	Methanethiol, trichloro-
P198	23422–53–9	Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride.
P197	17702–57–7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyl]oxy]phenyl]-

P050	115–29–7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76–44–8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032–65–7	Methiocarb.
P066	16752–77–5	Methomyl
P068	60–34–4	Methyl hydrazine
P064	624–83–9	Methyl isocyanate
P069	75–86–5	2-Methylactonitrile
P071	298–00–0	Methyl parathion
P190	1129–41–5	Metolcarb.
P128	315–8–4	Mexacarbate.
P072	86–88–4	alpha-Naphthylthiourea
P073	13463–39–3	Nickel carbonyl
P073	13463–39–3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557–19–7	Nickel cyanide
P074	557–19–7	Nickel cyanide Ni(CN) ₂
P075	¹ 54–11–5	Nicotine, & salts
P076	10102–43–9	Nitric oxide
P077	100–01–6	p-Nitroaniline
P078	10102–44–0	Nitrogen dioxide
P076	10102–43–9	Nitrogen oxide NO
P078	10102–44–0	Nitrogen oxide NO ₂
P081	55–63–0	Nitroglycerine (R)
P082	62–75–9	N-Nitrosodimethylamine
P084	4549–40–0	N-Nitrosomethylvinylamine
P085	152–16–9	Octamethylpyrophosphoramide
P087	20816–12–0	Osmium oxide OsO ₄ , (T-4)-
P087	20816–12–0	Osmium tetroxide
P088	145–73–3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135–22–0	Oxamyl.

P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	¹ 534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2- oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine.
P188	57-64-7	Physostigmine salicylate.
P110	78-00-2	Plumbane, tetraethyl-

P098	151–50–8	Potassium cyanide
P098	151–50–8	Potassium cyanide K(CN)
P099	506–61–6	Potassium silver cyanide
P201	2631–37–0	Promecarb
P070	116–06–3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P203	1646–88–4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl]oxime.
P101	107–12–0	Propanenitrile
P027	542–76–7	Propanenitrile, 3-chloro-
P069	75–86–5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55–63–0	1,2,3-Propanetriol, trinitrate (R)
P017	598–31–2	2-Propanone, 1-bromo-
P102	107–19–7	Propargyl alcohol
P003	107–02–8	2-Propenal
P005	107–18–6	2-Propen-1-ol
P067	75–55–8	1,2-Propylenimine
P102	107–19–7	2-Propyn-1-ol
P008	504–24–5	4-Pyridinamine
P075	¹ 54–11–5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57–47–6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-.
P114	12039–52–0	Selenious acid, dithallium(1+) salt
P103	630–10–4	Selenourea
P104	506–64–9	Silver cyanide
P104	506–64–9	Silver cyanide Ag(CN)
P105	26628–22–8	Sodium azide
P106	143–33–9	Sodium cyanide
P106	143–33–9	Sodium cyanide Na(CN)
P108	¹ 57–24–9	Strychnidin-10-one, & salts
P018	357–57–3	Strychnidin-10-one, 2,3-dimethoxy-

P108	¹ 57–24–9	Strychnine, & salts
P115	7446–18–6	Sulfuric acid, dithallium(1+) salt
P109	3689–24–5	Tetraethylidithiopyrophosphate
P110	78–00–2	Tetraethyl lead
P111	107–49–3	Tetraethyl pyrophosphate
P112	509–14–8	Tetranitromethane (R)
P062	757–58–4	Tetraphosphoric acid, hexaethyl ester
P113	1314–32–5	Thallic oxide
P113	1314–32–5	Thallium oxide Tl_2O_3
P114	12039–52–0	Thallium(I) selenite
P115	7446–18–6	Thallium(I) sulfate
P109	3689–24–5	Thiodiphosphoric acid, tetraethyl ester
P045	39196–18–4	Thiofanox
P049	541–53–7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108–98–5	Thiophenol
P116	79–19–6	Thiosemicarbazide
P026	5344–82–1	Thiourea, (2-chlorophenyl)-
P072	86–88–4	Thiourea, 1-naphthalenyl-
P093	103–85–5	Thiourea, phenyl-
P185	26419–73–8	Tirpate.
P123	8001–35–2	Toxaphene
P118	75–70–7	Trichloromethanethiol
P119	7803–55–6	Vanadic acid, ammonium salt
P120	1314–62–1	Vanadium oxide V_2O_5
P120	1314–62–1	Vanadium pentoxide
P084	4549–40–0	Vinylamine, N-methyl-N-nitroso-
P001	¹ 81–81–2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137–30–4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	557–21–1	Zinc cyanide
P121	557–21–1	Zinc cyanide $Zn(CN)_2$

P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram.
P001	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P001	¹ 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P002	591-08-2	Acetamide, -(aminothioxomethyl)-
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P003	107-02-8	2-Propenal
P004	309-00-2	Aldrin
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P005	107-18-6	Allyl alcohol
P005	107-18-6	2-Propen-1-ol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P008	504-24-5	4-Aminopyridine
P008	504-24-5	4-Pyridinamine
P009	131-74-8	Ammonium picrate (R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	7778-39-4	Arsenic acid H ₃ AsO ₄
P011	1303-28-2	Arsenic oxide As ₂ O ₅
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic oxide As ₂ O ₃
P012	1327-53-3	Arsenic trioxide
P013	542-62-1	Barium cyanide
P014	108-98-5	Benzenethiol
P014	108-98-5	Thiophenol

P015	7440-41-7	Beryllium powder
P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis[chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol

P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-28-6	Arsonous dichloride, phenyl-
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl amino)-2-oxoethyl] ester
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	¹ 534-52-1	4,6-Dinitro-o-cresol, & salts
P047	¹ 534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-

P049	541–53–7	Dithiobiuret
P049	541–53–7	Thioimidodicarbonic diamide $[(\text{H}_2\text{N})\text{C}(\text{S})]_2\text{NH}$
P050	115–29–7	Endosulfan
P050	115–29–7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P051	¹ 72–20–8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6beta,7beta, 7aalpha)-, & metabolites
P051	72–20–8	Endrin
P051	72–20–8	Endrin, & metabolites
P054	151–56–4	Aziridine
P054	151–56–4	Ethyleneimine
P056	7782–41–4	Fluorine
P057	640–19–7	Acetamide, 2-fluoro-
P057	640–19–7	Fluoroacetamide
P058	62–74–8	Acetic acid, fluoro-, sodium salt
P058	62–74–8	Fluoroacetic acid, sodium salt
P059	76–44–8	Heptachlor
P059	76–44–8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P060	465–73–6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P060	465–73–6	Isodrin
P062	757–58–4	Hexaethyl tetraphosphate
P062	757–58–4	Tetraphosphoric acid, hexaethyl ester
P063	74–90–8	Hydrocyanic acid
P063	74–90–8	Hydrogen cyanide
P064	624–83–9	Methane, isocyanato-
P064	624–83–9	Methyl isocyanate
P065	628–86–4	Fulminic acid, mercury(2+) salt (R,T)
P065	628–86–4	Mercury fulminate (R,T)

P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P066	16752-77-5	Methomyl
P067	75-55-8	Aziridine, 2-methyl-
P067	75-55-8	1,2-Propylenimine
P068	60-34-4	Hydrazine, methyl-
P068	60-34-4	Methyl hydrazine
P069	75-86-5	2-Methylactonitrile
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P070	116-06-3	Aldicarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P071	298-00-0	Methyl parathion
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P072	86-88-4	alpha-Naphthylthiourea
P072	86-88-4	Thiourea, 1-naphthalenyl-
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	¹ 54-11-5	Nicotine, & salts
P075	¹ 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P076	10102-43-9	Nitric oxide
P076	10102-43-9	Nitrogen oxide NO
P077	100-01-6	Benzenamine, 4-nitro-
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P082	62-75-9	Methanamine, -methyl-N-nitroso-

P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P084	4549-40-0	Vinylamine, -methyl-N-nitroso-
P085	152-16-9	Diphosphoramide, octamethyl-
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	Endothall
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P092	62-38-4	Mercury, (acetato-O)phenyl-
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P093	103-85-5	Thiourea, phenyl-
P094	298-02-2	Phorate
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P095	75-44-5	Carbonic dichloride
P095	75-44-5	Phosgene
P096	7803-51-2	Hydrogen phosphide
P096	7803-51-2	Phosphine
P097	52-85-7	Famphur
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P099	506-61-6	Potassium silver cyanide
P101	107-12-0	Ethyl cyanide
P101	107-12-0	Propanenitrile

P102	107–19–7	Propargyl alcohol
P102	107–19–7	2-Propyn-1-ol
P103	630–10–4	Selenourea
P104	506–64–9	Silver cyanide
P104	506–64–9	Silver cyanide Ag(CN)
P105	26628–22–8	Sodium azide
P106	143–33–9	Sodium cyanide
P106	143–33–9	Sodium cyanide Na(CN)
P108	¹ 157–24–9	Strychnidin-10-one, & salts
P108	¹ 157–24–9	Strychnine, & salts
P109	3689–24–5	Tetraethyldithiopyrophosphate
P109	3689–24–5	Thiodiphosphoric acid, tetraethyl ester
P110	78–00–2	Plumbane, tetraethyl-
P110	78–00–2	Tetraethyl lead
P111	107–49–3	Diphosphoric acid, tetraethyl ester
P111	107–49–3	Tetraethyl pyrophosphate
P112	509–14–8	Methane, tetranitro-(R)
P112	509–14–8	Tetranitromethane (R)
P113	1314–32–5	Thallic oxide
P113	1314–32–5	Thallium oxide Tl ₂ O ₃
P114	12039–52–0	Selenious acid, dithallium(1+) salt
P114	12039–52–0	Tetraethyldithiopyrophosphate
P115	7446–18–6	Thiodiphosphoric acid, tetraethyl ester
P115	7446–18–6	Plumbane, tetraethyl-
P116	79–19–6	Tetraethyl lead
P116	79–19–6	Thiosemicarbazide
P118	75–70–7	Methanethiol, trichloro-
P118	75–70–7	Trichloromethanethiol
P119	7803–55–6	Ammonium vanadate
P119	7803–55–6	Vanadic acid, ammonium salt

P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T)
P123	8001-35-2	Toxaphene
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P127	1563-66-2	Carbofuran
P128	315-8-4	Mexacarbate
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime.
P185	26419-73-8	Tirpate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P188	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P189	55285-14-8	Carbosulfan
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P190	1129-41-5	Metolcarb
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P191	644-64-4	Dimetilan
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P192	119-38-0	Isolan
P194	23135-22-0	Ethanimidthioic acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,

P196	15339-36-3	Manganese dimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4- [[methylamino]carbonyl]oxy]phenyl]-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[methylamino]- carbonyl]oxy]phenyl]-monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	1646-88-4	Aldicarb sulfone
P203	1646-88-4	Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P205	137-30-4	Ziram

¹CAS Number given for parent compound only.

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T), unless otherwise designated and are subject to the small quantity generator exclusion defined in § 261.5 (a) and (g).

[*Comment:* For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by Hazardous Waste Number.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance
U394	30558-43-1	A2213.
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	¹ 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
see F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine

U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban.
U278	22781-23-3	Bendiocarb.
U364	22961-82-6	Bendiocarb phenol.
U271	17804-35-2	Benomyl.
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)

U038	510–15–6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101–55–3	Benzene, 1-bromo-4-phenoxy-
U035	305–03–3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108–90–7	Benzene, chloro-
U221	25376–45–8	Benzenediamine, ar-methyl-
U028	117–81–7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84–74–2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84–66–2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131–11–3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117–84–0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95–50–1	Benzene, 1,2-dichloro-
U071	541–73–1	Benzene, 1,3-dichloro-
U072	106–46–7	Benzene, 1,4-dichloro-
U060	72–54–8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98–87–3	Benzene, (dichloromethyl)-
U223	26471–62–5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330–20–7	Benzene, dimethyl- (I,T)
U201	108–46–3	1,3-Benzenediol
U127	118–74–1	Benzene, hexachloro-
U056	110–82–7	Benzene, hexahydro- (I)
U220	108–88–3	Benzene, methyl-
U105	121–14–2	Benzene, 1-methyl-2,4-dinitro-
U106	606–20–2	Benzene, 2-methyl-1,3-dinitro-
U055	98–82–8	Benzene, (1-methylethyl)- (I)

U169	98–95–3	Benzene, nitro-
U183	608–93–5	Benzene, pentachloro-
U185	82–68–8	Benzene, pentachloronitro-
U020	98–09–9	Benzenesulfonic acid chloride (C,R)
U020	98–09–9	Benzenesulfonyl chloride (C,R)
U207	95–94–3	Benzene, 1,2,4,5-tetrachloro-
U061	50–29–3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72–43–5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98–07–7	Benzene, (trichloromethyl)-
U234	99–35–4	Benzene, 1,3,5-trinitro-
U021	92–87–5	Benzidine
U278	22781–23–3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.
U364	22961–82–6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U203	94–59–7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120–58–1	1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563–38–8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U090	94–58–6	1,3-Benzodioxole, 5-propyl-
U064	189–55–9	Benzo[rst]pentaphene
U248	¹ 81–81–2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50–32–8	Benzo[a]pyrene
U197	106–51–4	p-Benzoquinone
U023	98–07–7	Benzotrichloride (C,R,T)
U085	1464–53–5	2,2'-Bioxirane

U021	92–87–5	[1,1'-Biphenyl]-4,4'-diamine
U073	91–94–1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119–90–4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119–93–7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75–25–2	Bromoform
U030	101–55–3	4-Bromophenyl phenyl ether
U128	87–68–3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924–16–3	1-Butanamine, N-butyl-N-nitroso-
U031	71–36–3	1-Butanol (I)
U159	78–93–3	2-Butanone (I,T)
U160	1338–23–4	2-Butanone, peroxide (R,T)
U053	4170–30–3	2-Butenal
U074	764–41–0	2-Butene, 1,4-dichloro- (I,T)
U143	303–34–4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	71–36–3	n-Butyl alcohol (I)
U136	75–60–5	Cacodylic acid
U032	13765–19–0	Calcium chromate
U372	10605–21–7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester.
U271	17804–35–2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester.
U280	101–27–9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.

U238	51–79–6	Carbamic acid, ethyl ester
U178	615–53–2	Carbamic acid, methylnitroso-, ethyl ester
U373	122–42–9	Carbamic acid, phenyl-, 1-methylethyl ester.
U409	23564–05–8	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester.
U097	79–44–7	Carbamic chloride, dimethyl-
U389	2303–17–5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester.
U387	52888–80–9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester.
U114	¹ 111–54–6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303–16–4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U279	63–25–2	Carbaryl.
U372	10605–21–7	Carbendazim.
U367	1563–38–8	Carbofuran phenol.
U215	6533–73–9	Carbonic acid, dithallium(1+) salt
U033	353–50–4	Carbonic difluoride
U156	79–22–1	Carbonochloridic acid, methyl ester (I,T)
U033	353–50–4	Carbon oxyfluoride (R,T)
U211	56–23–5	Carbon tetrachloride
U034	75–87–6	Chloral
U035	305–03–3	Chlorambucil
U036	57–74–9	Chlordane, alpha & gamma isomers
U026	494–03–1	Chlornaphazin
U037	108–90–7	Chlorobenzene
U038	510–15–6	Chlorobenzilate

U039	59–50–7	p-Chloro-m-cresol
U042	110–75–8	2-Chloroethyl vinyl ether
U044	67–66–3	Chloroform
U046	107–30–2	Chloromethyl methyl ether
U047	91–58–7	beta-Chloronaphthalene
U048	95–57–8	o-Chlorophenol
U049	3165–93–3	4-Chloro-o-toluidine, hydrochloride
U032	13765–19–0	Chromic acid H ₂ CrO ₄ , calcium salt
U050	218–01–9	Chrysene
U051		Creosote
U052	1319–77–3	Cresol (Cresylic acid)
U053	4170–30–3	Crotonaldehyde
U055	98–82–8	Cumene (I)
U246	506–68–3	Cyanogen bromide (CN)Br
U197	106–51–4	2,5-Cyclohexadiene-1,4-dione
U056	110–82–7	Cyclohexane (I)
U129	58–89–9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	108–94–1	Cyclohexanone (I)
U130	77–47–4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50–18–0	Cyclophosphamide
U240	¹ 94–75–7	2,4-D, salts & esters
U059	20830–81–3	Daunomycin
U060	72–54–8	DDD
U061	50–29–3	DDT

U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U395	5952-26-1	Diethylene glycol, dicarbamate.
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate

U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U404	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-

U067	106–93–4	Ethane, 1,2-dibromo-
U076	75–34–3	Ethane, 1,1-dichloro-
U077	107–06–2	Ethane, 1,2-dichloro-
U131	67–72–1	Ethane, hexachloro-
U024	111–91–1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60–29–7	Ethane, 1,1'-oxybis-(I)
U025	111–44–4	Ethane, 1,1'-oxybis[2-chloro-
U184	76–01–7	Ethane, pentachloro-
U208	630–20–6	Ethane, 1,1,1,2-tetrachloro-
U209	79–34–5	Ethane, 1,1,2,2-tetrachloro-
U218	62–55–5	Ethanethioamide
U226	71–55–6	Ethane, 1,1,1-trichloro-
U227	79–00–5	Ethane, 1,1,2-trichloro-
U410	59669–26–0	Ethanimidothioic acid, N,N'–[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U394	30558–43–1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester.
U359	110–80–5	Ethanol, 2-ethoxy-
U173	1116–54–7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952–26–1	Ethanol, 2,2'-oxybis-, dicarbamate.
U004	98–86–2	Ethanone, 1-phenyl-
U043	75–01–4	Ethene, chloro-
U042	110–75–8	Ethene, (2-chloroethoxy)-
U078	75–35–4	Ethene, 1,1-dichloro-
U079	156–60–5	Ethene, 1,2-dichloro-, (E)-
U210	127–18–4	Ethene, tetrachloro-

U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	¹ 111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethyldene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-

U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone

U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-

U044	67–66–3	Methane, trichloro-
U121	75–69–4	Methane, trichlorofluoro-
U036	57–74–9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67–56–1	Methanol (I)
U155	91–80–5	Methapyrilene
U142	143–50–0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U247	72–43–5	Methoxychlor
U154	67–56–1	Methyl alcohol (I)
U029	74–83–9	Methyl bromide
U186	504–60–9	1-Methylbutadiene (I)
U045	74–87–3	Methyl chloride (I,T)
U156	79–22–1	Methyl chlorocarbonate (I,T)
U226	71–55–6	Methyl chloroform
U157	56–49–5	3-Methylcholanthrene
U158	101–14–4	4,4'-Methylenebis(2-chloroaniline)
U068	74–95–3	Methylene bromide
U080	75–09–2	Methylene chloride
U159	78–93–3	Methyl ethyl ketone (MEK) (I,T)
U160	1338–23–4	Methyl ethyl ketone peroxide (R,T)
U138	74–88–4	Methyl iodide
U161	108–10–1	Methyl isobutyl ketone (I)
U162	80–62–6	Methyl methacrylate (I,T)
U161	108–10–1	4-Methyl-2-pentanone (I)
U164	56–04–2	Methylthiouracil
U010	50–07–7	Mitomycin C

U059	20830–81–3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134–32–7	1-Naphthalenamine
U168	91–59–8	2-Naphthalenamine
U026	494–03–1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91–20–3	Naphthalene
U047	91–58–7	Naphthalene, 2-chloro-
U166	130–15–4	1,4-Naphthalenedione
U236	72–57–1	2,7-Naphthalenedisulfonic acid, 3,3'–[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63–25–2	1-Naphthalenol, methylcarbamate.
U166	130–15–4	1,4-Naphthoquinone
U167	134–32–7	alpha-Naphthylamine
U168	91–59–8	beta-Naphthylamine
U217	10102–45–1	Nitric acid, thallium(1+) salt
U169	98–95–3	Nitrobenzene (I,T)
U170	100–02–7	p-Nitrophenol
U171	79–46–9	2-Nitropropane (I,T)
U172	924–16–3	N-Nitrosodi-n-butylamine
U173	1116–54–7	N-Nitrosodiethanolamine
U174	55–18–5	N-Nitrosodiethylamine
U176	759–73–9	N-Nitroso-N-ethylurea
U177	684–93–5	N-Nitroso-N-methylurea
U178	615–53–2	N-Nitroso-N-methylurethane
U179	100–75–4	N-Nitrosopiperidine

U180	930–55–2	N-Nitrosopyrrolidine
U181	99–55–8	5-Nitro-o-toluidine
U193	1120–71–4	1,2-Oxathiolane, 2,2-dioxide
U058	50–18–0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75–21–8	Oxirane (I,T)
U126	765–34–4	Oxiranecarboxyaldehyde
U041	106–89–8	Oxirane, (chloromethyl)-
U182	123–63–7	Paraldehyde
U183	608–93–5	Pentachlorobenzene
U184	76–01–7	Pentachloroethane
U185	82–68–8	Pentachloronitrobenzene (PCNB)
See F027	87–86–5	Pentachlorophenol
U161	108–10–1	Pentanol, 4-methyl-
U186	504–60–9	1,3-Pentadiene (I)
U187	62–44–2	Phenacetin
U188	108–95–2	Phenol
U048	95–57–8	Phenol, 2-chloro-
U039	59–50–7	Phenol, 4-chloro-3-methyl-
U081	120–83–2	Phenol, 2,4-dichloro-
U082	87–65–0	Phenol, 2,6-dichloro-
U089	56–53–1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105–67–9	Phenol, 2,4-dimethyl-
U052	1319–77–3	Phenol, methyl-
U132	70–30–4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114–26–1	Phenol, 2-(1-methylethoxy)-, methylcarbamate.

U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)

U140	78–83–1	1-Propanol, 2-methyl- (I,T)
U002	67–64–1	2-Propanone (I)
U007	79–06–1	2-Propenamide
U084	542–75–6	1-Propene, 1,3-dichloro-
U243	1888–71–7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107–13–1	2-Propenenitrile
U152	126–98–7	2-Propenenitrile, 2-methyl- (I,T)
U008	79–10–7	2-Propenoic acid (I)
U113	140–88–5	2-Propenoic acid, ethyl ester (I)
U118	97–63–2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80–62–6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122–42–9	Propham.
U411	114–26–1	Propoxur.
U387	52888–80–9	Prosulfocarb.
U194	107–10–8	n-Propylamine (I,T)
U083	78–87–5	Propylene dichloride
U148	123–33–1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110–86–1	Pyridine
U191	109–06–8	Pyridine, 2-methyl-
U237	66–75–1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56–04–2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930–55–2	Pyrrolidine, 1-nitroso-
U200	50–55–5	Reserpine
U201	108–46–3	Resorcinol
U203	94–59–7	Safrole

U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide $\text{SeS}_2(\text{R,T})$
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	thallium chloride TiCl_3
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide

U410	59669-26-0	Thiodicarb.
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U409	23564-05-8	Thiophanate-methyl.
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate.
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine.
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate

U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	¹ 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less
U001	75-07-0	Acetaldehyde (I)
U001	75-07-0	Ethanal (I)
U002	67-64-1	Acetone (I)
U002	67-64-1	2-Propanone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U004	98-86-2	Ethanone, 1-phenyl-
U005	53-96-3	Acetamide, -9H-fluoren-2-yl-
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U007	79-06-1	2-Propenamide
U008	79-10-7	Acrylic acid (I)
U008	79-10-7	2-Propenoic acid (I)
U009	107-13-1	Acrylonitrile

U009	107-13-1	2-Propenenitrile
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]-
U010	50-07-7	Mitomycin C
U011	61-82-5	Amitrole
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U012	62-53-3	Aniline (I,T)
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Auramine
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U015	115-02-6	Azaserine
U015	115-02-6	L-Serine, diazoacetate (ester)
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U017	98-87-3	Benzene, (dichloromethyl)-
U018	56-55-3	Benz[a]anthracene
U019	71-43-2	Benzene (I,T)
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U021	92-87-5	Benzidine
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U022	50-32-8	Benzo[a]pyrene
U023	98-07-7	Benzene, (trichloromethyl)-
U023	98-07-7	Benzotrichloride (C,R,T)
U024	111-91-1	Dichloromethoxy ethane

U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	111-44-4	Dichloroethyl ether
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U026	494-03-1	Chlornaphazin
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U027	108-60-1	Dichloroisopropyl ether
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U028	117-81-7	Diethylhexyl phthalate
U029	74-83-9	Methane, bromo-
U029	74-83-9	Methyl bromide
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U030	101-55-3	4-Bromophenyl phenyl ether
U031	71-36-3	1-Butanol (I)
U031	71-36-3	n-Butyl alcohol (I)
U032	13765-19-0	Calcium chromate
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U033	353-50-4	Carbonic difluoride
U033	353-50-4	Carbon oxyfluoride (R,T)
U034	75-87-6	Acetaldehyde, trichloro-
U034	75-87-6	Chloral
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-

		octachloro-2,3,3a,4,7,7a-hexahydro-
U037	108–90–7	Benzene, chloro-
U037	108–90–7	Chlorobenzene
U038	510–15–6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U038	510–15–6	Chlorobenzilate
U039	59–50–7	p-Chloro-m-cresol
U039	59–50–7	Phenol, 4-chloro-3-methyl-
U041	106–89–8	Epichlorohydrin
U041	106–89–8	Oxirane, (chloromethyl)-
U042	110–75–8	2-Chloroethyl vinyl ether
U042	110–75–8	Ethene, (2-chloroethoxy)-
U043	75–01–4	Ethene, chloro-
U043	75–01–4	Vinyl chloride
U044	67–66–3	Chloroform
U044	67–66–3	Methane, trichloro-
U045	74–87–3	Methane, chloro- (I,T)
U045	74–87–3	Methyl chloride (I,T)
U046	107–30–2	Chloromethyl methyl ether
U046	107–30–2	Methane, chloromethoxy-
U047	91–58–7	beta-Chloronaphthalene
U047	91–58–7	Naphthalene, 2-chloro-
U048	95–57–8	o-Chlorophenol
U048	95–57–8	Phenol, 2-chloro-
U049	3165–93–3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U049	3165–93–3	4-Chloro-o-toluidine, hydrochloride
U050	218–01–9	Chrysene

U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U052	1319-77-3	Phenol, methyl-
U053	4170-30-3	2-Butenal
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Benzene, (1-methylethyl)-(I)
U055	98-82-8	Cumene (I)
U056	110-82-7	Benzene, hexahydro-(I)
U056	110-82-7	Cyclohexane (I)
U057	108-94-1	Cyclohexanone (I)
U058	50-18-0	Cyclophosphamide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U059	20830-81-3	Daunomycin
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U060	72-54-8	DDD
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U061	50-29-3	DDT
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-di chloro-2-propenyl) ester
U062	2303-16-4	Diallate

U063	53–70–3	Dibenz[a,h]anthracene
U064	189–55–9	Benzo[rst]pentaphene
U064	189–55–9	Dibenzo[a,i]pyrene
U066	96–12–8	1,2-Dibromo-3-chloropropane
U066	96–12–8	Propane, 1,2-dibromo-3-chloro-
U067	106–93–4	Ethane, 1,2-dibromo-
U067	106–93–4	Ethylene dibromide
U068	74–95–3	Methane, dibromo-
U068	74–95–3	Methylene bromide
U069	84–74–2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84–74–2	Dibutyl phthalate
U070	95–50–1	Benzene, 1,2-dichloro-
U070	95–50–1	o-Dichlorobenzene
U071	541–73–1	Benzene, 1,3-dichloro-
U071	541–73–1	m-Dichlorobenzene
U072	106–46–7	Benzene, 1,4-dichloro-
U072	106–46–7	p-Dichlorobenzene
U073	91–94–1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U073	91–94–1	3,3'-Dichlorobenzidine
U074	764–41–0	2-Butene, 1,4-dichloro-(I,T)
U074	764–41–0	1,4-Dichloro-2-butene (I,T)
U075	75–71–8	Dichlorodifluoromethane
U075	75–71–8	Methane, dichlorodifluoro-
U076	75–34–3	Ethane, 1,1-dichloro-
U076	75–34–3	Ethylidene dichloride
U077	107–06–2	Ethane, 1,2-dichloro-
U077	107–06–2	Ethylene dichloride
U078	75–35–4	1,1-Dichloroethylene

U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	1,2-Dichloroethylene
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U080	75-09-2	Methane, dichloro-
U080	75-09-2	Methylene chloride
U081	120-83-2	2,4-Dichlorophenol
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	2,6-Dichlorophenol
U082	87-65-0	Phenol, 2,6-dichloro-
U083	78-87-5	Propane, 1,2-dichloro-
U083	78-87-5	Propylene dichloride
U084	542-75-6	1,3-Dichloropropene
U084	542-75-6	1-Propene, 1,3-dichloro-
U085	1464-53-5	2,2'-Bioxirane
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U086	1615-80-1	N,N'-Diethylhydrazine
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbestrol
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-

U090	94-58-6	Dihydrosafrole
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U092	124-40-3	Methanamine, -methyl-(I)
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
U097	79-44-7	Carbamic chloride, dimethyl-
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U101	105-67-9	2,4-Dimethylphenol
U101	105-67-9	Phenol, 2,4-dimethyl-
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U103	77-78-1	Sulfuric acid, dimethyl ester
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U105	121-14-2	2,4-Dinitrotoluene

U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Diethyleneoxide
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U110	142-84-7	Dipropylamine (I)
U110	142-84-7	1-Propanamine, N-propyl-(I)
U111	621-64-7	Di-n-propylnitrosamine
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U112	141-78-6	Acetic acid ethyl ester (I)
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U114	¹ 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U114	¹ 111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U115	75-21-8	Ethylene oxide (I,T)
U115	75-21-8	Oxirane (I,T)
U116	96-45-7	Ethylenethiourea
U116	96-45-7	2-Imidazolidinethione
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U117	60-29-7	Ethyl ether (I)
U118	97-63-2	Ethyl methacrylate
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U119	62-50-0	Ethyl methanesulfonate

U119	62-50-0	Methanesulfonic acid, ethyl ester
U120	206-44-0	Fluoranthene
U121	75-69-4	Methane, trichlorofluoro-
U121	75-69-4	Trichloromonofluoromethane
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U124	110-00-9	Furfuran (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U125	98-01-1	Furfural (I)
U126	765-34-4	Glycidylaldehyde
U126	765-34-4	Oxiranecarboxyaldehyde
U127	118-74-1	Benzene, hexachloro-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U128	87-68-3	Hexachlorobutadiene
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U129	58-89-9	Lindane
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Ethane, hexachloro-
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U133	302-01-2	Hydrazine (R,T)
U134	7664-39-3	Hydrofluoric acid (C,T)

U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U136	75-60-5	Arsinic acid, dimethyl-
U136	75-60-5	Cacodylic acid
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U138	74-88-4	Methane, iodo-
U138	74-88-4	Methyl iodide
U140	78-83-1	Isobutyl alcohol (I,T)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U143	303-34-4	Lasiocarpine
U144	301-04-2	Acetic acid, lead(2+) salt
U144	301-04-2	Lead acetate
U145	7446-27-7	Lead phosphate
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-

U146	1335-32-6	Lead subacetate
U147	108-31-6	2,5-Furandione
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U149	109-77-3	Malononitrile
U149	109-77-3	Propanedinitrile
U150	148-82-3	Melphalan
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U153	74-93-1	Methanethiol (I,T)
U153	74-93-1	Thiomethanol (I,T)
U154	67-56-1	Methanol (I)
U154	67-56-1	Methyl alcohol (I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U155	91-80-5	Methapyrilene
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U159	78-93-3	2-Butanone (I,T)

U159	78–93–3	Methyl ethyl ketone (MEK) (I,T)
U160	1338–23–4	2-Butanone, peroxide (R,T)
U160	1338–23–4	Methyl ethyl ketone peroxide (R,T)
U161	108–10–1	Methyl isobutyl ketone (I)
U161	108–10–1	4-Methyl-2-pentanone (I)
U161	108–10–1	Pentanol, 4-methyl-
U162	80–62–6	Methyl methacrylate (I,T)
U162	80–62–6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U163	70–25–7	Guanidine, -methyl-N'-nitro-N-nitroso-
U163	70–25–7	MNNG
U164	56–04–2	Methylthiouracil
U164	56–04–2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U165	91–20–3	Naphthalene
U166	130–15–4	1,4-Naphthalenedione
U166	130–15–4	1,4-Naphthoquinone
U167	134–32–7	1-Naphthalenamine
U167	134–32–7	alpha-Naphthylamine
U168	91–59–8	2-Naphthalenamine
U168	91–59–8	beta-Naphthylamine
U169	98–95–3	Benzene, nitro-
U169	98–95–3	Nitrobenzene (I,T)
U170	100–02–7	p-Nitrophenol
U170	100–02–7	Phenol, 4-nitro-
U171	79–46–9	2-Nitropropane (I,T)
U171	79–46–9	Propane, 2-nitro- (I,T)

U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	Ethanamine, -ethyl-N-nitroso-
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	N-Nitroso-N-methylurea
U177	684-93-5	Urea, N-methyl-N-nitroso-
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U179	100-75-4	Piperidine, 1-nitroso-
U180	930-55-2	N-Nitrosopyrrolidine
U180	930-55-2	Pyrrolidine, 1-nitroso-
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U181	99-55-8	5-Nitro-o-toluidine
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U182	123-63-7	Paraldehyde
U183	608-93-5	Benzene, pentachloro-
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Ethane, pentachloro-
U184	76-01-7	Pentachloroethane
U185	82-68-8	Benzene, pentachloronitro-
U185	82-68-8	Pentachloronitrobenzene (PCNB)
U186	504-60-9	1-Methylbutadiene (I)

U186	504–60–9	1,3-Pentadiene (I)
U187	62–44–2	Acetamide, -(4-ethoxyphenyl)-
U187	62–44–2	Phenacetin
U188	108–95–2	Phenol
U189	1314–80–3	Phosphorus sulfide (R)
U189	1314–80–3	Sulfur phosphide (R)
U190	85–44–9	1,3-Isobenzofurandione
U190	85–44–9	Phthalic anhydride
U191	109–06–8	2-Picoline
U191	109–06–8	Pyridine, 2-methyl-
U192	23950–58–5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U192	23950–58–5	Pronamide
U193	1120–71–4	1,2-Oxathiolane, 2,2-dioxide
U193	1120–71–4	1,3-Propane sultone
U194	107–10–8	1-Propanamine (I,T)
U194	107–10–8	n-Propylamine (I,T)
U196	110–86–1	Pyridine
U197	106–51–4	p-Benzoquinone
U197	106–51–4	2,5-Cyclohexadiene-1,4-dione
U200	50–55–5	Reserpine
U200	50–55–5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester,(3beta,16beta,17alpha,18beta,20alpha)-
U201	108–46–3	1,3-Benzenediol

U201	108-46-3	Resorcinol
U202	181-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U202	181-07-2	Saccharin, & salts
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide $\text{SeS}_2(\text{R,T})$
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[(methylnitroamino)-carbonyl]amino]-
U206	18883-66-4	Streptozotocin
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Ethene, tetrachloro-
U210	127-18-4	Tetrachloroethylene
U211	56-23-5	Carbon tetrachloride
U211	56-23-5	Methane, tetrachloro-
U213	109-99-9	Furan, tetrahydro-(I)

U213	109–99–9	Tetrahydrofuran (I)
U214	563–68–8	Acetic acid, thallium(1+) salt
U214	563–68–8	Thallium(I) acetate
U215	6533–73–9	Carbonic acid, dithallium(1+) salt
U215	6533–73–9	Thallium(I) carbonate
U216	7791–12–0	Thallium(I) chloride
U216	7791–12–0	Thallium chloride TlCl
U217	10102–45–1	Nitric acid, thallium(1+) salt
U217	10102–45–1	Thallium(I) nitrate
U218	62–55–5	Ethanethioamide
U218	62–55–5	Thioacetamide
U219	62–56–6	Thiourea
U220	108–88–3	Benzene, methyl-
U220	108–88–3	Toluene
U221	25376–45–8	Benzenediamine, ar-methyl-
U221	25376–45–8	Toluenediamine
U222	636–21–5	Benzenamine, 2-methyl-, hydrochloride
U222	636–21–5	o-Toluidine hydrochloride
U223	26471–62–5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U223	26471–62–5	Toluene diisocyanate (R,T)
U225	75–25–2	Bromoform
U225	75–25–2	Methane, tribromo-

U226	71-55-6	Ethane, 1,1,1-trichloro-
U226	71-55-6	Methyl chloroform
U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	Ethane, 1,1,2-trichloro-
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Ethene, trichloro-
U228	79-01-6	Trichloroethylene
U234	99-35-4	Benzene, 1,3,5-trinitro-
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[<i>(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]</i>]-, tetrasodium salt
U236	72-57-1	Trypan blue
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U237	66-75-1	Uracil mustard
U238	51-79-6	Carbamic acid, ethyl ester
U238	51-79-6	Ethyl carbamate (urethane)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U239	1330-20-7	Xylene (I)
U240	¹ 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U240	¹ 94-75-7	2,4-D, salts & esters
U243	1888-71-7	Hexachloropropene
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-

	7	
U244	137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U244	137-26-8	Thiram
U246	506-68-3	Cyanogen bromide (CN)Br
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U247	72-43-5	Methoxychlor
U248	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U248	¹ 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U249	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less
U271	17804-35-2	Benomyl
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U278	22781-23-3	Bendiocarb
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine

U359	110–80–5	Ethanol, 2-ethoxy-
U359	110–80–5	Ethylene glycol monoethyl ether
U364	22961–82–6	Bendiocarb phenol
U364	22961–82–6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U367	1563–38–8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563–38–8	Carbofuran phenol
U372	10605–21–7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U372	10605–21–7	Carbendazim
U373	122–42–9	Carbamic acid, phenyl-, 1-methylethyl ester
U373	122–42–9	Propham
U387	52888–80–9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U387	52888–80–9	Prosulfocarb
U389	2303–17–5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U389	2303–17–5	Triallate
U394	30558–43–1	A2213
U394	30558–43–1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	5952–26–1	Diethylene glycol, dicarbamate
U395	5952–26–1	Ethanol, 2,2'-oxybis-, dicarbamate
U404	121–44–8	Ethanamine, N,N-diethyl-

U404	121-44-8	Triethylamine
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester
U409	23564-05-8	Thiophanate-methyl
U410	59669-26-0	Ethanimidothioic acid, N,N'-(thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U410	59669-26-0	Thiodicarb
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U411	114-26-1	Propoxur
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
See F027	87-86-5	Pentachlorophenol
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
See F027	93-72-1	Silvex (2,4,5-TP)
See F027	93-76-5	2,4,5-T
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol

¹CAS Number given for parent compound only.

Related Resources for P and U Wastes:

- Proposed Rule - Removal of Saccharin and Its Salts from the Lists of Hazardous Constituents, Hazardous Wastes, and Hazardous Substances
[75 FR 20942; April 22, 2010](http://www.gpo.gov/fdsys/pkg/FR-2010-04-22/pdf/2010-942.pdf)

- Final Rule - Removal of Saccharin and Its Salts from the Lists of Hazardous Constituents, Hazardous Wastes, and Hazardous Substances
[75 FR 78918; December 17, 2010](#)
- MEMO: [P AND U-LISTED WASTES](#)
- MEMO: [STATUS OF USED AND DISCARDED PESTICIDES](#)
- MEMO: [PRESERVATIVES ADDED TO PESTICIDES ARE NOT CONSIDERED ACTIVE INGREDIENTS FOR PURPOSES OF THE P- AND U-LISTS.](#)
- MEMO: [DISPOSAL OF ANTOINEPLASTIC AGENTS AS U-LISTED WASTES](#)
- MEMO: [SCOPE OF HAZARDOUS WASTE LISTING P046 \(PHENTERMINE\)](#)
- MEMO: [SCOPE OF HAZARDOUS WASTE LISTING P042 \(EPINEPHRINE\)](#)
- MEMO: [CONTAINERS THAT ONCE HELD P-LISTED PHARMACEUTICALS](#)
- LETTER: [REGULATORY STATUS OF CERTAIN WASTES FROM TESTING, DISCARDED PROTECTIVE EQUIPMENT, AND OTHER MANUFACTURING WASTES](#)
- LETTER: [SPENT METHYL BROMIDE ACTIVATED CARBON IS NOT U029](#)
- LETTER: [USE OF CAS NUMBERS AS HAZARDOUS WASTE IDENTIFICATION AID](#)
- LETTER: [P- AND U-LISTINGS APPLY TO COMMERCIAL CHEMICAL PRODUCTS WITH THE GENERIC NAMES LISTED IN 261.33.](#)
- LETTER: [CLASSIFICATION OF SPILLED OFF-SPECIFICATION COMMERCIAL CHEMICAL PRODUCT](#)
- LETTER: [STATUS OF SOIL CONTAMINATED FROM PESTICIDE APPLICATION](#)
- LETTER: [REGULATION OF UNUSED DERMAL NICOTINE PATCHES](#)
- LETTER: [CHARACTERIZATION OF USED TOLUENE WHEN SOLD AS FUEL ADDITIVE OR FOR OTHER FUEL PURPOSES](#)
- LETTER: [EPINEPHRINE SYRINGE AND EPINEPHRINE SALTS](#)
- LETTER: [APPLICATION OF P AND U WASTE CODES TO FERTILIZERS MIXED WITH INSECTICIDES OR HERBICIDES](#)
- Q&A(U226): [METHYL CHLOROFORM](#)
- Q&A: [DEFINITION OF COMMERCIAL CHEMICAL PRODUCTS FOR SOLID WASTE DETERMINATIONS VS. HAZARDOUS WASTE DETERMINATIONS](#)
- Q&A: [COMMERCIAL CHEMICAL PRODUCT DEFINITION IN §261.33](#)
- Q&A: [USED COMMERCIAL CHEMICAL PRODUCT](#)
- Q&A: [DISCARDED NITROGLYCERINE PILLS AND WASTE CODE P081](#)
- Q&A: [STATUS OF DISCARDED MERCURY THERMOMETERS](#)
- Q&A: [PARAFORMALDEHYDE IS AN OFF-SPECIFICATION FORM OF FORMALDEHYDE AND MEETS THE U122 LISTING](#)
- Q&A: [RESIDUES FROM USED SYRINGES](#)
- Q&A: [ISOMERS OF P- AND U-LISTED WASTES](#)

Delisting Wastes

The RCRA regulations provide a form of relief for listed wastes through a site-specific process known as “delisting.” The regulations governing the delisting process are given at 40 CFR 260.20 and 260.22. These regulations set out a procedure and standards by which persons may demonstrate that a specific waste from a particular generating facility should not be regulated as a listed hazardous waste. Under these regulations, any person may petition EPA to remove its waste from regulation by excluding it from the lists of hazardous wastes contained in Part 261. EPA has granted delistings to a variety of facilities, and these may be found in §261 Appendix IX.

LIST OF RCRA EXCLUDED WASTES

LIST OF RCRA EXCLUDED WASTES

Wastes Which Are Not Solid Wastes

- Domestic Sewage and Mixtures of Domestic Sewage §261.4(a)(1)
- Point Source Discharge §261.4(a)(2)
- Irrigation Return Flow §261.4(a)(3)
- Radioactive Waste §261.4(a)(4)
- In-Situ Mining §261.4(a)(5)
- Pulping Liquors §261.4(a)(6)
- Spent Sulfuric Acid §261.4(a)(7)
- Reclamation in Enclosed Tanks §261.4(a)(8)
- Spent Wood Preservatives §261.4(a)(9)
- Coke By-Product Wastes §261.4(a)(10)
- Splash Condenser Dross Residue §261.4(a)(11)
- Hazardous Secondary Materials From the Petroleum Refining Industry §261.4(a)(12)
- Excluded Scrap Metal §261.4(a)(13)
- Shredded Circuit Boards §261.4(a)(14)
- Pulping Condensates Derived from Kraft Mill Steam Strippers §261.4(a)(15)
- Spent materials generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation §261.4(a)(17)
- Petrochemical recovered oil from an associated organic chemical manufacturing facility §261.4(a)(18)
- Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid §261.4(a)(19)
- Hazardous secondary materials used to make zinc fertilizers §261.4(a)(20)
- Zinc fertilizers made from hazardous wastes, or excluded hazardous secondary materials §261.4(a)(21)
- Used cathode ray tubes (CRTs) §261.4(a)(22)
- Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator §261.4(a)(23)
- Hazardous secondary material that is generated and then transferred to a verified reclamation facility for the purpose of reclamation is not a solid waste §261.4(a)(24)
- Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation §261.4(a)(26)
- Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste §261.4(a)(27)

Solid Wastes Which Are Not Hazardous Wastes

- Household Hazardous Waste §261.4(b)(1)
- Agricultural Waste §261.4(b)(2)
- Mining Overburden §261.4(b)(3)
- Fossil Fuel Combustion Waste (Bevill) §261.4(b)(4)
- Oil, Gas, and Geothermal Wastes (Bentsen Amendment) §261.4(b)(5)
- Trivalent Chromium Wastes §261.4(b)(6)
- Mining and Mineral Processing Wastes (Bevill) §261.4(b)(7)
- Cement Kiln Dust (Bevill) §261.4(b)(8)
- Arsenically Treated Wood §261.4(b)(9)
- Petroleum Contaminated Media & Debris from Underground Storage Tanks §261.4(b)(10)
- Injected Groundwater §261.4(b)(11)
- Spent Chlorofluorocarbon Refrigerants §261.4(b)(12)
- Used Oil Filters §261.4(b)(13)
- Used Oil Distillation Bottoms §261.4(b)(14)
- Landfill Leachate or Gas Condensate Derived from Certain Listed Wastes §261.4(b)(15)
- Project XL Pilot Project Exclusions §261.4(b)(17)
- Project XL Pilot Project Exclusions §261.4(b)(18)

Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels

Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels

METALS	TCLP Regulatory Level, mg/L	EPA Hazardous Waste Number	Recommended Test Method
Arsenic	5.0	D004	7061
Barium	100.0	D005	7080
Cadmium	1.0	D006	7130
Chromium	5.0	D007	7190
Lead	5.0	D008	7420
Mercury	0.2	D009	7471
Selenium	1.0	D010	7741
Silver	5.0	D011	7760

VOLATILE ORGANICS	TCLP Regulatory Level, mg/L	EPA Hazardous Waste Number	Recommended Test Method
Benzene	0.5	D018	8260B
Carbon Tetrachloride	0.5	D019	8260B
Chlorobenzene	100.0	D021	8260B
Chloroform	6.0	D022	8260B
1,4-Dichlorobenzene	7.5	D027	8260B
1,2-Dichloroethane	0.5	D028	8260B
1,1-Dichloroethylene	0.7	D029	8260B
Methyl Ethyl Ketone	200.0	D035	8260B
Tetrachloroethylene	0.7	D039	8260B
Trichloroethylene	0.5	D040	8260B
Vinyl Chloride	0.2	D043	8260B

SEMIVOLATILE ORGANICS	TCLP Regulatory Level, mg/L	EPA Hazardous Waste Number	Recommended Test Method
o-Cresol	¹ 200	D023	8270C
m-Cresol	¹ 200	D024	8270C
p-Cresol	¹ 200	D025	8270C
Cresol	¹ 200	D026	8270C
2,4-Dinitrotoluene	0.13	D030	8270C
Hexachlorobenzene	0.13	D032	8270C
Hexachlorobutadiene	0.5	D033	8270C
Hexachloroethane	3.0	D034	8270C
Nitrobenzene	2.0	D036	8270C
Pentachlorophenol	100.0	D037	8270C
Pyridine	25.0	D038	8270C
2,4,5-Trichlorophenol	400.0	D041	8270C
2,4,6-Trichlorophenol	2.0	D042	8270C

¹If Cresols cannot be differentiated, total cresol may be used.

ORGANOCHLORINE PESTICIDES	TCLP Regulatory Level, mg/L	EPA Hazardous Waste Number	Recommended Test Method
Chlordane	0.03	D020	8081A
Endrin	0.02	D012	8081A
Heptachlor (and its Epoxide)	0.008	D031	8081A
Lindane	0.4	D013	8081A
Methoxychlor	10.0	D014	8081A
Toxaphene	0.5	D015	8081A

CHLOROPHENOXY ACID HERBICIDES	TCLP Regulatory Level, mg/L	EPA Hazardous Waste Number	Recommended Test Method
2,4-D	10.0	D016	8150
2,4,5-TP (Silvex)	1.0	D017	8150

Reference: 40 CFR 261, Appendix II, 1993 ed., as amended by 58 FR 46040, August 31, 1993.

Appendix D

Pennsylvania Residual Waste Disposal and Reporting Forms

FORM 26R



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM 26R
CHEMICAL ANALYSIS OF RESIDUAL WASTE
ANNUAL REPORT BY THE GENERATOR

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 26R, reference the item number and identify the date prepared. The date on attached sheets needs to match the date noted below.

General Reference 287.54

Date Prepared/Revised

DEP USE ONLY

Date Received & General Notes

SECTION A. CLIENT (GENERATOR OF THE WASTE) INFORMATION

Company Name

If a Subsidiary, Name of Parent Company EPA Generator ID#

Company Mailing Address Line 1 Company Mailing Address Line 2

Company Address Last Line – City State Zip+4 Phone Ext

Company Contact Last Name First Name MI Suffix

Municipality County

Contact Phone Ext Contact Email Address

Is the waste generated at the Company Mailing Address (noted above)? Yes No
If 'No', describe location of waste generation and storage. _____

Municipality County State

SECTION B. WASTE DESCRIPTION

Residual Waste Code	Residual Waste Code Description	Amount	Unit of Measure	Time Frame
			<input type="checkbox"/> cu yd <input type="checkbox"/> gal	
			<input type="checkbox"/> lb <input type="checkbox"/> ton	<input type="checkbox"/> One Time

1. GENERAL PROPERTIES

a. pH Range to (based on analyses or knowledge)

b. Physical State Liquid Waste (EPA Method 9095)
 Solid (EPA Method 9095)
 Gas (ambient temperature & pressure)

c. Physical Appearance Color Odor
Number of Solid or Liquid Phases of Separation _____
Describe each phase of separation. _____

2. CHEMICAL ANALYSIS ATTACHMENTS

a. The results of a detailed chemical characterization of the waste, as described in the instructions, is attached. Yes No

b. A detailed description of the waste sampling method is attached. Yes No

c. The quality assurance/quality control procedures employed by the laboratory(ies) is attached. Yes No

d. The results of the hazardous waste determination is attached. Yes No

e. If applicable, a detailed explanation supporting use of generator knowledge in lieu of actual chemical analysis is attached. Yes No N/A

3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS

a. A detailed description of the manufacturing and/or pollution control processes producing the waste, as specified in the instructions, is attached. Yes No

b. A schematic of the manufacturing and/or pollution control processes producing the waste, as specified in the instructions, is attached. Yes No

c. If portions of the information submitted are confidential, the substantiation for a confidentiality claim, as described in the instructions, is attached. Yes No N/A

SECTION C. MANAGEMENT OF RESIDUAL WASTE**1. PROCESSING OR DISPOSAL FACILITY(IES)**

The area below (a.-d.) will accommodate the identification of two facilities. Attach additional sheets if necessary.

a. Solid waste permit number(s) for processing or disposal facility being utilized.

b. Facility Name
 Address Line 1
 Address Line 1
 Address City State ZIP
 Municipality County

c. Facility Contact Name
 Title
 Phone Email Address

d. Volume of waste shipped to processing or disposal facility in the previous year.
 cu yd gal lb ton (check one)

a. Solid waste permit number(s) for processing or disposal facility being utilized.

b. Facility Name
 Address Line 1
 Address Line 1
 Address City State ZIP
 Municipality County

c. Facility Contact Name
 Title
 Phone Email Address

d. Volume of waste shipped to processing or disposal facility in the previous year.
 cu yd gal lb ton (check one)

2. BENEFICIAL USE

a. Has the waste been approved for beneficial use? Yes No
 If "Yes", list the general permit number or approval number.

b. Volume of waste beneficially used in the previous year.
 cu yd gal lb ton (check one)

SECTION D. CERTIFICATION

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment.

Check the following, if applicable:

I certify the information required in Section B-1, General Properties was supplied to the Department for the year _____ and has not changed.

Form Submitted: Form 26R
 Other (specify) _____

Date Submitted: _____

I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _____ and has not changed.

Form Submitted: Form 26R
 Other (specify) _____

Date Submitted: _____

I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year _____ and has not changed.

Form Submitted: Form 26R
 Other (specify) _____

Date Submitted: _____

Name of Responsible Official

Title _____

Signature _____ Date _____

Form U



FORM U

REQUEST TO PROCESS OR DISPOSE OF RESIDUAL WASTE

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form U, reference the item number and identify the date prepared. The date on attached sheets needs to match the date noted below.

Date Prepared/Revised

DEP USE ONLY

Date Received & General Notes

SECTION A. LANDFILL CLIENT (LANDFILL OR PROCESSING FACILITY OWNER) INFORMATION

DEP Client ID# DEP Client Type / Code

Organization Name or Registered Fictitious Name

SECTION B. LANDFILL SITE (LANDFILL OR PROCESSING FACILITY) INFORMATION

DEP Site ID# Site Name Landfill Permit ID#

Site Contact Last Name First Name MI Suffix

Site Contact Title Site Contact Email Address

SECTION C. GENERATOR CLIENT (GENERATOR OF THE WASTE) INFORMATION

Company Name DEP Generator ID#

Company Contact Last Name First Name MI Suffix

Company Mailing Address Line 1 Company Mailing Address Line 2

Company Address Last Line – City State Zip+4 Country

Company Phone Ext Company Email Address

Company Contact Last Name First Name MI Suffix

Contact Phone Ext Contact Email Address

If a Subsidiary, Name of Parent Company

Is the waste generated at the Company Mailing Address (noted above)?

 Yes No

If 'No', describe location of waste generation and storage.

Township County State

SECTION D. WASTE DESCRIPTION

Residual Waste Code	Residual Waste Code Description	Amount	Unit of Measure	Time Frame
			<input type="checkbox"/> cu yd <input type="checkbox"/> gal <input type="checkbox"/> lb <input type="checkbox"/> ton	<input type="checkbox"/> One Time

1. GENERAL PROPERTIES

a. pH Range to (based on analyses or knowledge)

b. Physical State

- Liquid Waste (EPA Method 9095)
- Solid (EPA Method 9095)
- Gas (ambient temperature & pressure)

c. Physical Appearance Color Odor

Number of Solid or Liquid Phases of Separation

Describe each phase of separation.

d. Attached is information from the generator certifying that a hazardous waste determination has been done and that the waste is not hazardous waste as defined in 40 CFR 261, as incorporated by reference at 25 Pa. Code 261a.1.
Caution: If 'No', the application form is incomplete.

e. Is the waste treated hazardous waste? Yes No
 If 'Yes', list the hazardous waste code(s) that apply to the hazardous waste before treatment.

If 'Yes', what treatment option was selected?

What limit was required to be met by the treatment option?

Provided a copy of the certification required under 40 CFR 268.7(a), as incorporated by reference at 25 Pa. Code 268a.1, that the waste meets all the land disposal restriction requirements, as specified in 40 CFR Part 268, Subpart D (Land Disposal Restrictions-Treatment Standards).

f. Has the waste been delisted as a hazardous waste by DEP or US EPA? Yes No N/A

g. Has the waste been accepted for disposal/processing at another Pennsylvania facility? Yes No
 If 'Yes', list the facility permit ID number(s).

h. Has an application for disposal/processing of the waste at another Pennsylvania facility been submitted? Yes No
 If 'Yes', list the facility permit ID number(s).

2. ANALYSIS ATTACHMENTS

a. Has a detailed physical, chemical and radiological characterization of the waste and its leachate been conducted? Yes No
 If 'No', provide detailed explanation supporting use of generator knowledge in lieu of actual analysis.

If 'Yes', attached is a description of the waste sampling methods in accordance with the waste sampling plan as required in §271.611(a)(3) or §287.132(a)(3) and the *Final Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities* (Document Number 250-3100-001).

b. Laboratory Accreditation Number

3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS

a. Attached is a detailed description of the manufacturing and/or pollution control processes producing the waste. Yes No
 If 'No', provide explanation.

b. Attached is a schematic of the manufacturing and/or pollution control processes producing the waste. Yes No
 If 'No', provide explanation.

c. Attached is the substantiation for a confidentiality claim (if portions of the information submitted are confidential). Yes No N/A

4. CHEMICAL ANALYSIS WAIVER

Categories of residual wastes that qualify for the waiving of chemical analysis by the Department are listed below.
 Check the appropriate box(es) that match the waste proposed to be accepted for disposal.

<input type="checkbox"/> burnt demolition debris	<input type="checkbox"/> carpet scraps
<input type="checkbox"/> cured rubber scrap	<input type="checkbox"/> empty containers (uncontaminated)
<input type="checkbox"/> fabric/cloth/textile/leather wastes (excluding treatment sludges)	<input type="checkbox"/> fiberglass insulation scrap
<input type="checkbox"/> food wastes (excluding treatment sludges)	<input type="checkbox"/> hot drained used oil filters (non-terne plated)
<input type="checkbox"/> metal scrap (excluding powdered grindings or if contaminated with fluids or oils)	<input type="checkbox"/> sawdust (excluding treated wood)
<input type="checkbox"/> shingle scrap	<input type="checkbox"/> waste paper
<input type="checkbox"/> waste plastic (excluding extrusion manufacturing & uncured resins)	<input type="checkbox"/> wood wastes (excluding treated wood)
<input type="checkbox"/> Other (explain)	

All waste types not listed above must be approved in writing in the permit by the Department prior to processing or disposal facility acceptance.

SECTION E. PROPOSED PROCESSING, STORAGE AND/OR DISPOSAL METHOD

Will any special handling procedures (besides direct disposal) described in the waste acceptance plan, be used when managing the waste? Yes No

If 'Yes', describe.

Is this material re-used for construction or operation of the facility? Yes No

If Yes', describe.

SECTION F. SOURCE REDUCTION STRATEGY

Form 25R must be completed by the generator and attached to this application unless waived in the instructions to that form.

Form 25R attached.

Yes No Waived

SECTION G. CERTIFICATION OF PROCESSING OR DISPOSAL FACILITY

I hereby certify that the statements of fact contained therein are true and correct to the best of my knowledge, information and belief. This statement and verification is made subject to the penalties of 18 Pa. C.S.A. Section 4904, relating to un-sworn falsification to authorities.

Name of Responsible Official

Title

Signature

Date

Form 25R



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WASTE MANAGEMENT

FORM 25R SOURCE REDUCTION STRATEGY

For Information contact 717-787-7381 (Residual Waste) or 717-787-6239 (Hazardous Waste). Related environmental information is available electronically via Internet. Access the DEP Web Site at <http://www.dep.state.pa.us> (choose: Information by Subject/Online Documents Warehouse/Permits and Authorization Packages/ Waste Management/Municipal and Residual Waste or Hazardous Waste)

This form provides guidance on the content and format of the written source reduction strategy (SRS). Supplemental guidance on the comprehensive process of analyzing the processes by which waste is generated and developing and evaluating source reduction options is available from the Department in a separate document, the "Source Reduction Strategy Instructions." The written SRS is intended to summarize the results of a comprehensive internal process of source reduction assessments and decisions. Generally, a separate SRS should be prepared for each type of waste stream generated. The strategy may be prepared on this form or prepared on separate paper using this format.

Source reduction is the reduction or elimination of the quantity or toxicity of residual waste before it is generated. Source reduction may be achieved through changes within the production process, including process modifications, feedstock substitutions, improvements in feedstock purity, shipping and packing modifications, housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process. Please note that source reduction does not include dewatering, compaction, waste reclamation, or the use or reuse of waste. These activities, although they can result in environmental benefit, are of lower priority in the waste management hierarchy and should not be included in the SRS. These processing, use, and reclamation activities are encouraged through the permit-by-rule and beneficial use provisions of the residual waste regulations.

Residual Waste Requirements

A generator who generates more than an average of 2,200 lbs of all residual waste per generating location per month of the previous year is required to prepare a SRS.

Hazardous Waste Requirements

A generator who generates more than 1,000 kilograms of hazardous waste in any month of the year is required to prepare a SRS.

General Requirements

The SRS must be available on-site for inspection and must be submitted:

- with a Form U or Module 1 (for the disposal or processing of waste at a permitted site),
- with a permit application, or
- upon request by the department.

The SRS shall be updated when there is a significant change in the manufacturing process or every five years.

Regulatory References:

Hazardous Waste Regulations

§260a.10 (definition of "source reduction")
§262a.100 (source reduction strategy)
§264.73(b)(9) (Operating Record)
§262.23(a)(1) (Certification)

Municipal Waste Regulations

§271.1 (definition of "source reduction")
§271.612 (Additional Application Requirements)

Residual Waste Regulations

§287.53 (duties of generators: source reduction strategy)
§287.1 (definition of "source reduction")
§287.52(b)(6) (biennial reports)
§287.133 (waste analysis: source reduction strategy)

SRS Options:

1. If you have established a source reduction program and know what action you will take to reduce this waste stream then the general information and Sections A, B, and C should be completed.
2. If you are proposing to do nothing to reduce the quantity or toxicity of waste, then the general information and Sections A, B, and D should be completed.
3. If you have established a program but are still evaluating what you will do, you should complete the general information plus the applicable sections of A, B, C and D. You should present the ongoing source reduction evaluations which will lead to a completed strategy.

FORM 25R

SECTION A. APPLICANT IDENTIFIER	
Applicant Name: _____	
SECTION B. GENERAL INFORMATION	
This section must be completed.	
Generator:	_____
Contact Person:	_____
Phone Number:	_____
Mailing Address:	_____ _____ _____ _____
Facility Address:	_____
(if different from mailing address)	_____
Facility SIC Code(s):	_____
<p>The information contained in this form is true and correct to the best of my knowledge and belief.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Name of Responsible Official</p> <hr/> <p>Signature of Responsible Official</p> <hr/> <p>Date</p> </div> </div>	
<p>1. Waste stream name and description: <input type="checkbox"/> Residual waste <input type="checkbox"/> Hazardous waste</p> <p>2. Describe source reduction actions taken during the past five years. You should quantify any reduction in the weight or toxicity or waste and maintain records to document this reduction. This question is intended to give recognition for past source reduction achievements.</p> <p>3. State whether you have established a source reduction program. You may include a statement of top management's support or corporate source reduction goals.</p>	

FORM 25R**SECTION C.**

Complete this section if you have established a source reduction program and are proposing to take action to reduce the quantity or toxicity of this waste.

1. Describe the methods and procedures that you will use to achieve source reduction for this waste.

2. Quantify the projected reduction by weight or toxicity for each technique described in #1. You may use the method of measurement most appropriate for the waste and the generating process. Discussion of several measurement options is contained in the "Source Reduction Strategy Instructions."

3. Specify when each method or procedure described in #1 will be implemented.

Summary of Section C

method or procedure	expected reduction	implementation

FORM 25R

Section D.

Complete this section if you have not established a source reduction program for this waste stream, that is, if you are not proposing to take any action to reduce the quantity or toxicity of the waste.

1. Characterize the waste stream, including source, hazards, chemical analyses, properties, generation rate, management techniques and management costs.
2. Describe all the potential source reduction options that you have considered.
3. Describe in detail how each option was evaluated. Include the specific technical, economic, or other criteria that were used.

FORM 25R**Section D.**

4. Explain why each option was not selected.

Summary of Section D

method or procedure	why not selected

GENERATOR'S RESIDUAL WASTE BIENNIAL REPORT FOR 2016

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WASTE MANAGEMENT
 P.O. BOX 8550
 HARRISBURG, PA 17105-8550

330

GENERATOR'S RESIDUAL WASTE BIENNIAL REPORT FOR 2016
Report Due By March 1, 2017

A. This site DID NOT generate more than 13 tons of residual waste in 2016.

1. Your I.D. No. P

2. Generator's Name _____

3. Mailing Address _____

4. Location Address _____

5. _____ (Name of Municipality)

6. City

7. County _____

Borough

Township
(Check one)

8. Contact Name _____

Contact Title _____

9. Contact Phone No. (

)

Area Code

-

Phone Number

10. Contact Email Address _____

Y N

11. Does your site generate any coproducts?

Certification

I certify pursuant to the penalties of 18 Pa. C.S.A. Section 4904 that to the best of my knowledge, information and belief, the information contained in this biennial report is true and correct and is in conformance with Chapter 287 of the rules and regulations of the Department of Environmental Protection.

M M D D Y Y

Print or Type Name _____

Signature _____

Form 330-GM

FORM 330-GM

II. Generator's Name

III. Waste Information

A. Residual Waste Code	B. NAICS Code						C. TRI	D. Waste Description	
	1	2	3	4	5	6		7	
R							<input type="checkbox"/>		

IV. Waste Management – Onsite and Offsite

	A. Offsite Facility ID or Permit Number												B. Captive	C. Waste Quantity in TONS												D. Phy. State	E. Unit Type
1													<input type="checkbox"/>														
	Facility Name/Location																										
2													<input type="checkbox"/>														
	Facility Name/Location																										
3													<input type="checkbox"/>														
	Facility Name/Location																										
4													<input type="checkbox"/>														
	Facility Name/Location																										
5													<input type="checkbox"/>														
	Facility Name/Location																										
6													<input type="checkbox"/>														
	Facility Name/Location																										

Appendix E

Hazardous Waste Generator Requirements

Summary of Key Hazardous Waste Generator Requirements

Summary of Key Hazardous Waste Generator Requirements

Summary of Key Hazardous Waste Generator Requirements			
Status/Category	Very Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
Monthly Waste Generation Limits	<p>No more than:</p> <ul style="list-style-type: none"> ▪ 220 lbs. per month of hazardous waste; ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste; ▪ 220 lbs. per month of hazardous residue/debris. 	<p>Between:</p> <ul style="list-style-type: none"> ▪ 220 lbs. and 2,200 lbs. per month of hazardous waste <p>No more than:</p> <ul style="list-style-type: none"> ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste; ▪ 220 lbs. per month of hazardous residue/debris. 	<p>More than:</p> <ul style="list-style-type: none"> ▪ 2,200 lbs. per month of hazardous waste; ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste.
Total Waste Accumulation Limits	<p>At any time, no more than:</p> <ul style="list-style-type: none"> ▪ 2,200 lbs. per month of hazardous waste; ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste. 	<p>At any time, no more than:</p> <ul style="list-style-type: none"> ▪ 13,200 lbs. of hazardous waste; ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste. 	<p>At any time, more than:</p> <ul style="list-style-type: none"> ▪ 13,200 lbs. of hazardous waste; ▪ 2.2 lbs. per month of <i>acutely</i> hazardous waste.
Classify Wastes	Yes – Documentation of hazardous waste determination.	Yes – Documentation of hazardous waste determination.	Yes – Documentation of hazardous waste determination.
Obtain EPA ID #	No	Yes – required to obtain EPA ID#	Yes – required to obtain EPA ID#
Used Licensed Transporter	No	Yes	Yes
Ship to Authorized Facility	Yes – must be shipped using a licensed hazardous waste transporter with an EPA ID # and Hazardous Transporter license	Yes – must be shipped using a licensed hazardous waste transporter with an EPA ID # and Hazardous Transporter license	Yes – must be shipped using a licensed hazardous waste transporter with an EPA ID # and Hazardous Transporter license
On-site Accumulation Time Limits	None	Yes – Accumulate hazardous waste for no more than 180 days (270 days if shipping over 200 miles) except in satellite areas.	Yes – Accumulate hazardous waste for no more than 90 days.
Tank Requirements	None	Yes – Comply secondary containment, inspection, design standards, and general operations management	Yes – Comply secondary containment, inspection, design standards, and general operations management
Container Requirements	None	Yes – Comply with requirements for use and management of containers	Yes – Comply with requirements for use and management of containers

Summary of Key Hazardous Waste Generator Requirements			
Status/Category	Very Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
Secondary Containment	None	Yes – Required for container and tank storage areas	Yes – Required for container and tank storage areas
Separate Incompatibles	No	Yes – Comply with incompatible waste management requirements. See Section 3.2.	Yes – Comply with incompatible waste management requirements. See Section 3.2.
Label Containers and Tanks	No	Yes – Comply with labeling requirements. See Section 3.2.	Yes – Comply with labeling requirements. See Section 3.2.
Manifest Wastes	No	Yes – Complete, distribute, and maintain manifest forms. See Section 3.4.	Yes – Complete, distribute, and maintain manifest forms. See Section 3.4.
Comply with DOT Shipping Regulations	Yes – Prepare waste for transportation in accordance with DOT regulations and requirements. See Section 3.3.	Yes – Prepare waste for transportation in accordance with DOT regulations and requirements. See Section 3.3.	Yes – Prepare waste for transportation in accordance with DOT regulations and requirements. See Section 3.3.
Have Emergency Equipment Procedures	No	Yes – Comply with preparedness and prevention requirements. See Section 3.2.	Yes – Comply with preparedness and prevention requirements. See Section 3.2.
Maintain Records	Yes – Complete and maintain waste records. See Section 3.5.	Yes – Complete and maintain waste records. See Section 3.5.	Yes – Complete and maintain waste records. See Section 3.5.
Biennial Reporting	No	No	Yes – Complete quarterly and biennial reports (due March 1 of each even numbered year) See Section 6.5.
Exception Reporting	No	Yes – See Section 3.6.	Yes – See Section 3.6.
Written Contingency Plan	No	No	Yes – Prepare a written contingency plan which details precautions and procedures to be used to minimize the hazards and dangers associated with hazardous waste.
Written Personnel Training Plan	No	No	Yes – Prepare a written training plan which details how and when employees will be trained.
Train Personnel	No	Yes – Facility personnel must be trained in hazardous waste management procedures relevant to their positions,	Yes – Facility personnel must be trained in hazardous waste management procedures

Summary of Key Hazardous Waste Generator Requirements			
Status/Category	Very Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
		including contingency plan implementation.	relevant to their positions, including contingency plan implementation.
Conduct Self-inspections	No	Yes – Maintain logs of all inspections.	Yes – Maintain logs of all inspections.
Spill Reporting	Yes	Yes	Yes
Air Emission Requirements (Subpart CC Rule)	No	No	Yes – Applies to certain volatile organic containing hazardous wastes.
Land Disposal Restrictions	No	Yes – Prepare notification/certifications for each shipment of an EPA hazardous waste. See Section 3.6.	Yes – Prepare notification/certifications for each shipment of an EPA hazardous waste. See Section 3.6.

Regulatory Citation Summary

Regulatory Citation Summary

Requirement	VSQG	SQG	LQG
Classify Wastes	40 CFR 260.10	40 CFR 260.10	40 CFR 260.10
Obtain EPA ID#	N/A	40 CFR 262.18	40 CFR 262.18
Renew EPA ID#	N/A	40 CFR 262.18	40 CFR 262.18
Quantity Limits	40 CFR 260.10	40 CFR 260.10	40 CFR 260.10
Use Licensed Transporter	N/A	40 CFR 263.10 and 25 Pa Code 263a.13	40 CFR 263.10 and 25 Pa Code 263a.13
Ship to Authorized Facility	Details identified in 40 CFR 262.14(a)(5)	40 CFR Parts 264/265,266/267 and 270	40 CFR Parts 264/265,266/267 and 270
Ship to Facility under same ownership as generator	40 CFR 262.14(a)(5)(viii)	N/A	N/A
Storage Time Limits	Conditional - see 40 CFR 262.14(a)(3)	40 CFR 262.16(b)-(d)	40 CFR 262.17(a)
Tank Requirements	Episodic event - see 40 CFR 262.232(a)(4)(ii)	40 CFR 262.16(b)(3)	40 CFR 262.17(a)(2)
Container Requirements	Episodic event - see 40 CFR 262.232(a)(4)(i)	40 CFR 262.16(b)(2)	40 CFR 262.17(a)(1)
Secondary Containment	N/A	N/A	N/A
Separate Incompatibles	N/A	40 CFR 262.16(b)(2)(v)	40 CFR 262.17(a)(1)(vii)
Label Containers and Tanks	Conditional to shipping - see 40 CFR 262.14(a)(5)(viii)(B)	40 CFR 262.16(b)(6)	40 CFR 262.17(a)(5)
Manifest Wastes	N/A	40 CFR 262 Subpart B	40 CFR 262 Subpart B
Manifest Exception Reporting	N/A	40 CFR 262.42(b) and 262.43	40 CFR 262.42(a) and 262.43
Comply with DOT Shipping Regulations	N/A	40 CFR 263 Subpart A, B, and C	40 CFR 263 Subpart A, B, and C
Maintain Records	Episodic event - see 40 CFR 262.232	40 CFR 262.11(f) and 262.40(a) and (d)	40 CFR 262.11(f) and 262.40(a) and (d)
Biennial Reporting	N/A	N/A	40 CFR 262.41
Written Contingency Plan	N/A	40 CFR 262.16(b)(9)	40 CFR 262.260
Preparedness and Prevention	N/A	40 CFR 262.16(b)(8) and (9)	40 CFR 262.17(a)(6)
Personnel Training	N/A	40 CFR 262.16(b)(9)(iii)	40 CFR 262.17(a)(7)
Storage Area Inspection	N/A	40 CFR 262.16(b)(2)(iv)	40 CFR 262.17(a)(1)(v)
Spill Reporting	Episodic event - see 40 CFR 262.232(a)(2)	40 CFR 262.16(b)(9)(iv)	40 CFR 262.17(a)(6)
Land Disposal Restrictions	N/A	40 CFR 268	40 CFR 268

Appendix F

Hazardous Waste Disposal and Reporting Forms



RCRA Subtitle C Reporting Instructions and Forms

EPA Forms 8700-12, 8700-13 A/B, 8700-23

**DISCLAIMER: This is an excerpt containing only the information
pertinent to the Site Identification Form (Form 8700-12). The
Instructions and Forms for all three forms can be found here:**

**[https://rcrainfo.epa.gov/rcrainfoweb/documents/
rcra_subtitleC_forms_and_instructions.pdf](https://rcrainfo.epa.gov/rcrainfoweb/documents/rcra_subtitleC_forms_and_instructions.pdf)**

(OMB #2050-0024; Expires 05/31/2020)

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INTRODUCTION

GENERAL INFORMATION

The U.S. Environmental Protection Agency's (EPA's) mission to protect human health and the environment includes the responsibility to effectively manage, with the States, the nation's hazardous waste facilities regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). As part of this task, the EPA and the States:

- Collect and maintain information about sites that are conducting RCRA Subtitle C activities via the RCRA Subtitle C Site Identification Form (8700-12);
- Collect and maintain information about the generation, management, and final disposition of the nation's hazardous waste via the Hazardous Waste Report Form (8700-13 A/B); and
- Collect permit information from owners and operators of RCRA facilities where hazardous waste is treated, stored, or disposed via the Hazardous Waste Permit Part A Form (8700-23).

NOTE

Although this document contains information and instructions for completing the forms listed above, it should not be considered a substitute for the regulations in Title 40 of the Code of Federal Regulations (40 CFR). Rather it should be considered a supplement to the regulations and provide additional information not contained in 40 CFR. As a handler of regulated waste, you are responsible for learning and complying with all requirements that apply to you and your regulated waste activities.

In addition, this document and the regulations in 40 CFR address only the Federal hazardous waste program. Many States may have notification requirements that differ from the Federal requirements; therefore, those States may use the Federal forms or may choose to use a State form that requires information not requested in the Federal EPA form. Again, it is your responsibility to make sure that you have completed and submitted all forms required under the Federal or your respective State program.

This document is separated into three main sections Notification of RCRA Subtitle C Activities (Site Identification Form), Hazardous Waste Report, and RCRA Hazardous Waste Part A Permit Application. It supersedes all previous documents titled Notification of RCRA Subtitle C Activity, 2015 Hazardous Waste Report, and RCRA Hazardous Waste Part A Permit Application. Please read each section carefully and follow the instructions provided for each applicable set of forms.

WHERE TO GET HELP

FEDERAL REGULATIONS

The Federal regulations can be found at: <http://www.gpo.gov/fdsys/>.

RCRA LAWS AND REGULATIONS

The RCRA overview, tools, resources, etc. can be found at: <https://www.epa.gov/rcra>.

RCRA ONLINE

The RCRA Online tool is designed to enable users to locate documents, including publications and other outreach materials that cover a wide range of RCRA issues and topics. The tool can be found at: <https://yosemite.epa.gov/osw/rcra.nsf/how+to+use?OpenForm>

STATE CONTACTS

We have listed the addresses and phone numbers of the contacts in each State who can answer your questions and help you understand the Federal and State requirements that apply to you. This contact list is located at: <https://rcrainfo.epa.gov/rcrainfoweb/documents/contacts.pdf>.

Authorized States may have state-specific forms and instructions for reporting and program requirements that are more stringent and broader-in-scope than the federal requirements. Please check with your State contact listed in the above link.

COMPLIANCE ASSISTANCE CENTERS

The EPA's Compliance Assistance Centers help businesses, colleges and universities, local governments, tribes and federal facilities understand and comply with environmental requirements and save money through pollution prevention techniques. Visit the Compliance Assistance Centers at: <https://www.epa.gov/compliance/compliance-assistance-centers> for a comprehensive source of compliance assistance information and resources.

EPA SMALL BUSINESS OMBUDSMAN OFFICE

1-800-368-5888.

YOUR TRADE ASSOCIATION

If you are a member of an industry-specific trade association, they may have information regarding hazardous wastes that are generated by other members.

CONFIDENTIAL BUSINESS INFORMATION (CBI)

All information you submit via the forms provided in this document can be released to the public, per the Freedom of Information Act, unless it is determined to be confidential by the EPA pursuant to 40 CFR Part 2.

You may not withhold information from the Administrator of the EPA because it is confidential. However, when the Administrator is requested to consider information confidential, it must be treated according to the EPA regulations contained in 40 CFR Part 2, Subpart B. These regulations provide that a business may, if it desires, assert a claim of business confidentiality covering all or part of the information furnished to the EPA. 40 CFR 2.203(b) explains how to assert a claim.

The EPA will treat information covered by such a claim in accordance with the procedures set forth in 40 CFR Part 2, Subpart B. If someone requests release of information covered by a claim of confidentiality, or if the EPA otherwise decides to make a determination as to whether such information is entitled to confidential treatment, the EPA will notify the business. The EPA will not disclose information as to when a claim of confidentiality has been made except to the extent of and in accordance with 40 CFR Part 2, Subpart B. However, if the business does not claim confidentiality when it furnishes the information, the EPA may make the information available to the public without notice to the business.

If your State is authorized to conduct the RCRA Subtitle C program, check with the State if you wish to assert a claim of business confidentiality on your submission. The State may have specific procedures for asserting a claim.

FILLING OUT THE FORMS

SYMBOLS

LIST

The **LIST** symbol denotes references to relevant code lists. Please use only the codes included in the instructions or in the lists of codes provided.

SKIP INSTRUCTIONS

The → symbol denotes directions to skip to the next appropriate section or item to be completed, given certain responses to some questions.

NOTE

The **NOTE** symbol denotes explanatory text of information relevant to filling out the forms.

ALPHANUMERIC FIELDS

Valid characters for alphanumeric fields are limited to:

'~!@#\$%^&*()_-+={}[]|\;,.?/1234567890ABCDEFGHIJKLMNPQRSTUVWXYZ

Invalid characters for alphanumeric fields include: <>

If the “<” or “>” symbols are used to indicate less than or greater than, it is recommended that these symbols be replaced with “LT” or “GT.”

COMMENTS SECTION OF FORMS

Use the Comments section where applicable to clarify or continue any entry. For the general comment sections, reference the section number and item letter of the entry that is being continued. For example, if your site has more federally regulated hazardous waste codes than can fit in Item 10.B, enter the

remaining waste codes in the Comments section and cross-reference Item 10.B. For example, you would write: "Item 10.B, continued: D007."

PAGE NUMBERING OF FORMS

When you have filled out all the appropriate forms on your RCRA Subtitle C submission, number the pages (each piece of paper is a page) consecutively throughout your submission. **Do not** number each set of forms separately, but rather number each page sequentially. The individual page number and the total number of pages in your submission should appear at the bottom of each page (e.g., Page 1 of 7, Page 2 of 7).

If it is necessary to continue information from one form onto another page, make additional copies of the form and number the additional pages with the same page number as the first page, followed by a letter (e.g., page 27, page 27a, page 28, page 28a, 28b). When continuing information on a supplemental page, enter only the information that is being continued.

PAPER FORM REPORTING

Each form is included in this document. If submitting paper copy, photocopy as many forms as you need to complete your submission. Make copies **after** you have written your site name and EPA Identification Number in the top left-hand corner of the form, but **before** you begin filling out the form.

After you have finish filling out the forms, keep a copy for a period of at least three years from the due date of the report as required by 40 CFR 262.40(b).

ELECTRONIC REPORTING

The EPA encourages electronic reporting of RCRA Subtitle C information. Facilities can now enter data via electronic submissions by using the RCRAInfo Industry Application (RIA). The RIA allows for Site Identification Form submissions (myRCRAid) and Hazardous Waste Report submissions (Biennial Report). To see if your State has opted in to the use of the RIA, and obtain instructions on how to file electronically, contact your State or EPA Regional Office.

NOTIFICATION OF RCRA SUBTITLE C ACTIVITIES (SITE IDENTIFICATION FORM)

AUTHORIZATION

Section 3010 of Subtitle C of the Resource Conservation and Recovery Act (RCRA) requires any person who generates, transports, or recycles regulated wastes or who owns or operates a facility for the treatment, storage, or disposal of regulated wastes to notify the U.S. Environmental Protection Agency (EPA) of their activities, including the location and general description of the activities and the regulated wastes handled. Respondents must submit the information required in the Notification of Subtitle C Activity Instructions and Form by completing the RCRA Subtitle C Site Identification Form (EPA Form 8700-12). As required by statute, the EPA promulgated regulations to implement these notification requirements at 40 CFR Parts 260, 261, 262, 263, 264, 265, 266, 270, 273, and 279. The EPA needs this information to determine the universe of persons who generate, handle, and manage these regulated wastes; assign EPA Identification Numbers; and ensure that these regulated wastes are managed in a way that protects human health and the environment as required by RCRA. This is mandatory reporting by the respondents.

The EPA enters notification information submitted by respondents into RCRAInfo, the EPA national database, and assigns EPA Identification Numbers. The EPA uses this information to identify the universe of regulated waste generators, handlers, and managers and their specific regulated waste activities. The EPA also uses the information for tracking and for a variety of enforcement and inspection purposes. Finally, the EPA uses this information to ensure that regulated waste is managed properly, that statutory provisions are upheld, and that regulations are adhered to by facility owners or operators.

Section 3007(b) of RCRA and 40 CFR Part 2, Subpart B, which defines the EPA's general policy on public disclosure of information, both contain provisions for confidentiality. However, the Agency does not anticipate that businesses will assert a claim of confidentiality covering all or part of the Notification of Subtitle C Activity. If such a claim were asserted, the EPA must and will treat the information in accordance with the regulations cited above. The EPA also will assure that the information collection complies with the Privacy Act of 1974 and Office of Management and Budget (OMB) Circular 108.

Estimated Burden: Facilities - The reporting and recordkeeping burden for the Notification of Regulated Waste Activity (initial and subsequent) is estimated to average 1 hour for a facility to complete and submit the form, and keep copies of notification and affiliation agreements on site, as applicable. **State Agencies** - The recordkeeping burden for the Notification of Regulated Waste Activity (initial and subsequent) is estimated to average 2 hours for State agencies to review and enter notification information into the RCRAInfo database. There is no reporting associated with this requirement, and as such, there is no reporting burden for State agencies.

To comment on the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, the EPA has established a public docket for the Information Collection Request (ICR) under Docket ID Number EPA-HQ-OLEM-2016- 0182, which is available for online viewing at www.regulations.gov, or in person viewing at the RCRA Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the RCRA Docket is (202) 566-0270. An electronic version of the public docket is available at www.regulations.gov.

This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OLEM-2016-0182 and OMB Control Number 2050-0024 in any correspondence.

INTRODUCTION

These instructions are designed to help you determine if you are subject to requirements under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) for notifying the U.S. Environmental Protection Agency (EPA) of your regulated waste activities. Regulated wastes are hazardous wastes as defined by 40 CFR Part 261, universal wastes as defined by 40 CFR Part 273, and used oil as defined by 40 CFR Part 279. If you are managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), you also must notify under 40 CFR 260.42 using the RCRA Subtitle C Site Identification Form and Addendums to the Site Identification Form. In addition, you must notify if:

- you are a facility that either recycles hazardous waste with a RCRA permit (i.e., store the hazardous waste prior to recycling), or recycles hazardous waste without first storing the material you must notify under 40 CFR 261.6 (c)(2)(iv) which references 40 CFR 265.75;
- you are a very small quantity generator (VSQGs), previously called conditionally exempt small quantity generators (CESQGs) and you are taking advantage of the episodic generation provision at 40 CFR 262.232 (a);
- you are large quantity generator (LQG) consolidating waste from VSQGs under the control of the same person under 40 CFR 262.17 (f));
- you are closing either a waste accumulation unit or your facility, both prior to closing and after conducting closure performance operations under 40 CFR 262.17 (a)(8)).

The instructions contained in this document will assist you in obtaining or updating an EPA Identification number by completing and submitting the RCRA Subtitle C Site Identification Form (Site ID Form). RCRA is a Federal law. If you are regulated but do not comply with the RCRA notification requirements, you may be subject to civil penalties.

DETERMINING IF YOU MUST NOTIFY

HOW TO DETERMINE IF YOU MUST NOTIFY EPA OF YOUR SUBTITLE C ACTIVITIES

All persons who generate, transport, recycle, treat, store, or dispose of hazardous waste are required to notify the EPA (or their State agency if the State is authorized to operate its own hazardous waste program) of their hazardous waste activities. Furthermore, if you are managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), you also must notify using the RCRA Subtitle C Site Identification Form and the Addendum to the Site Identification Form: Notification of Hazardous Secondary Material Activity. Lastly, if you are a recognized trader arranging for import or export of hazardous wastes, including hazardous waste managed under the alternate management

standards of 40 CFR Part 266, you must notify. These persons must obtain an EPA Identification Number unless their solid waste has been excluded from regulation or their hazardous waste has been exempted as outlined below. These respective notification requirements are found in 40 CFR Parts 260, 261, 262, 263, 264, 265, and 266.

In addition to the discussion below, you will need to refer to 40 CFR Part 261 to help you determine if the waste you handle is both a solid waste and a hazardous waste that is regulated under RCRA. If you need help making this determination after reading these instructions, contact the agency listed for your State. If your facility was granted a solid waste variance under 40 CFR 260.30 prior to July 13, 2015, the management of your hazardous secondary materials under 40 CFR 260.30 is grandfathered under the previous regulations and you are not required to notify.

NOTE

Under the Hazardous Waste Import Regulations, 40 CFR Part 262.84, foreign generators should not apply for an EPA Identification Number. These regulations state that when filling out a U.S. manifest, you must include the name and address of the foreign generator, and the name, address, and EPA Identification Number of the importer. Please contact the U.S. firms involved with your shipments and determine which firm will serve as the U.S. Importer.

To determine if you handle a solid waste that is also a hazardous waste and regulated under RCRA, ask yourself the following questions:

DO I HANDLE A SOLID WASTE?

40 CFR 261.2 defines “solid waste” as any discarded material that is not excluded under 40 CFR 261.4(a) or that is not excluded by variance granted under 40 CFR 260.30 and 260.31. A discarded material is any material which is:

- Abandoned, as explained in 40 CFR 261.2(b); or
- Recycled, as explained in 40 CFR 261.2(c); or
- Considered inherently waste-like as explained in 40 CFR 261.2(d); or
- A military munition identified as a solid waste in 40 CFR 266.202.

The list of general exclusions can be found in 40 CFR 261.4. If the solid waste that you handle has been excluded, either by rule or special variance, then you do not need to notify the EPA for that solid waste unless otherwise stated in the regulations. If your solid waste was not excluded from regulation, you need to determine if it is a hazardous waste that the EPA regulates. The EPA regulates a solid waste as hazardous waste in two ways:

- By specifically listing the solid waste as a hazardous waste and assigning it a unique EPA Hazardous Waste Code Number; or
- By regulating it because it possesses any of four hazardous waste characteristics and assigning it a generic EPA Hazardous Waste Code Number.

IS MY SOLID WASTE SPECIFICALLY LISTED AS A HAZARDOUS WASTE?

40 CFR 261.30 through 261.33 identify certain solid wastes that the EPA has specifically listed as hazardous. Persons who handle listed hazardous waste are subject to regulation and must notify the EPA of their hazardous waste activities unless they are exempted as discussed below. Refer to these regulations to see if your solid waste is included as a “listed hazardous waste.” If you are handling a newly regulated hazardous waste and have already notified the EPA prior to that hazardous waste being regulated and already have an EPA Identification Number, you do not need to submit a Subsequent Notification for that newly regulated hazardous waste.

DOES MY SOLID WASTE POSSESS A HAZARDOUS CHARACTERISTIC?

Even if your solid waste is not specifically listed as a hazardous waste, it may still be hazardous because it exhibits certain hazardous characteristics. These characteristics are:

- Ignitability;
- Corrosivity;
- Reactivity; and
- Toxicity.

40 CFR 261.20 through 261.24 explain each of the characteristics and outlines the testing procedures you should use to determine if your solid waste meets these characteristics. Persons who handle characteristic hazardous waste that is regulated must notify the EPA of their activities unless they are exempted, as discussed below. If you are handling a newly regulated hazardous waste and have already notified the EPA prior to that hazardous waste being regulated and already have an EPA Identification Number, you do not need to submit a Subsequent Notification for that newly regulated hazardous waste.

HOW TO DETERMINE IF YOU MUST NOTIFY EPA OF YOUR UNIVERSAL WASTE ACTIVITIES

Under 40 CFR Part 273, Subpart C, Large Quantity Handlers of Universal Waste (LQH UW) who accumulate a total of 5,000 kilograms (kg) or more of universal wastes at any time are required to notify the EPA (or their State agency if the State is authorized to operate its own universal waste program) of their universal waste activities and obtain an EPA Identification Number, unless they have previously notified the EPA of their hazardous waste activities. LQH UWs must notify the EPA of their universal waste activities and obtain an EPA Identification Number before meeting or exceeding the 5,000 kg storage limit. Small Quantity Handlers of Universal Waste are exempt from these notification requirements.

NOTE

Please refer to the regulations in 40 CFR Part 273 to ensure that you are aware of all the requirements that apply to your universal waste handling activities.

HOW TO DETERMINE IF YOU MUST NOTIFY EPA OF YOUR USED OIL MANAGEMENT ACTIVITIES

Under 40 CFR Part 279, Subparts E, F, G, and H, respectively, persons who transport used oil; process or re-refine used oil; burn off-specification used oil for energy recovery; or market used oil fuel, are required to notify the EPA (or their State agency if the State is authorized to operate its own used oil program) and obtain an EPA Identification Number, unless they are exempt as outlined below. Off-specification used oil may be burned for energy recovery in an industrial furnace, boiler, or hazardous waste incinerator subject to regulation under Subpart O of 40 CFR Part 264 or 265.

Used oil transporters; used oil processors/re-refiners; off-specification used oil burners; and used oil fuel marketers who have not previously notified the EPA of their hazardous waste activities or notified under 40 CFR Part 266, Subpart E (replaced by 40 CFR Part 279) must notify the EPA to identify their used oil management activities.

NOTE

Please refer to the regulations in 40 CFR Part 279 to ensure that you are aware of all the requirements that apply to your used oil management activities.

EXEMPTIONS

40 CFR 262.13 and 261.6(a)(3) list certain hazardous wastes that are not subject to RCRA regulation. If the hazardous waste that you handle has been exempted, then you do not need to notify the EPA for that hazardous waste.

USED OIL FOR ENERGY RECOVERY

Used oil that is to be burned for energy recovery and that meets the specification provided under 40 CFR 279.11 is exempt from the regulations. However, the person who first claims that the used oil meets the specification is subject to notification as a used oil fuel marketer and certain other requirements (see 40 CFR Part 279, Subpart H). The burner of fuel that meets the specification in 40 CFR 279.11 is not required to notify.

USED OIL GENERATORS

Used oil generators are not required to notify the EPA.

USED OIL GENERATORS OPERATING USED OIL-FIRED SPACE HEATERS

Persons who burn only used oil that they generate (or used oil received from household do-it-yourself used oil changers) in used oil-fired space heaters are exempt from the notification requirement provided that the device is vented to the outdoors and the device is not designed to have a capacity greater than 0.5 million BTU/hour.

FILING A NOTIFICATION OF RCRA SUBTITLE C ACTIVITIES FORM**OBTAIN OR UPDATE AN EPA ID NUMBER**

If you do not currently have an EPA Identification Number and you handle regulated waste or hazardous secondary material directly or as an E-manifest broker, or if you have an EPA Identification Number and need to revise information regarding your site and/or activity, you must submit a Site Identification Form with a reason for submittal of Obtaining or Updating an EPA ID Number for an on-going regulated activity that will continue for a period of time. Circumstances under which you should submit this notification include:

- If you generate, transport, treat, store, or dispose of hazardous waste. or
- If you recycle hazardous wastes. (Recyclable materials are defined as hazardous wastes that are recycled). The recycling process itself is exempt from regulation, but you must notify the EPA and obtain an EPA Identification Number prior to recycling recyclable materials; or
- If you are a large quantity handler of universal waste. (Notification is required for people who have not previously notified the EPA of their hazardous waste activities or who have not already sent a notification to the EPA as required by 40 CFR 273.32); or
- If you transport, process, or re-refine used oil; burn off-specification used oil for energy recovery; or market used oil. (Notification is required for people who have not previously notified the EPA of their hazardous waste activities or have not notified under 40 CFR Part 279 or under 40 CFR Part 266, Subpart E, which was replaced by 40 CFR Part 279.)
- If you are an eligible academic entity opting into 40 CFR Part 262, Subpart K for managing laboratory hazardous wastes AND you have never submitted site identification information, you must submit this form to notify the appropriate State or EPA Regional Office of your activities.

NOTE

You must check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262, Subpart K in order for you to notify

- If you will begin managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27) you must submit this form, pursuant to 40 CFR 260.42, to notify the appropriate State or EPA Regional Office of your activities.

NOTE

You must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions in order for you to notify.

- If you are an Electronic Manifest Broker that has a contractual relationship and elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system for handlers of hazardous wastes.
- If you are either a VSQG or a SQG who, as a result of a planned or unplanned episodic event, generates a quantity of hazardous waste in a calendar month sufficient to cause the facility to move

into a more stringent generator category (i.e., VSQG to either an SQG or an LQG; or an SQG to an LQG).

- If your business moves to another location and you are still conducting activities regulated under RCRA Subtitle C.
- If the contact for your site changes.
- If the ownership of your site changes.
- If an additional owner has been added or replaced since you submitted your last notification.
- If the type of RCRA Subtitle C activity you conduct changes.
- If you have previously submitted site identification information and are an eligible academic entity opting into or withdrawing from 40 CFR Part 262, Subpart K for managing laboratory hazardous wastes, you must use this form.

NOTE

You must check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262, Subpart K in order for you to notify.

- If you are managing or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), you are required to re-notify by March 1 of each even-numbered year pursuant to 40 CFR 260.42.

NOTE

If your facility was granted a solid waste variance under 40 CFR 260.30 prior to July 13, 2015, the management of your hazardous secondary materials under 40 CFR 260.30 is grandfathered under the previous regulations and you are not required to notify.

HOW MANY FORMS SHOULD I FILE?

If you fall under any of the regulations above to notify EPA, you must submit one Site Identification Form along with the applicable Addendums. For example, if you manage hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), along with the Site Identification Form you should submit the Notification of Hazardous Secondary Material Activity addendum. If you are an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event pursuant to 40 CFR 262 Subpart L, along with Site Identification Form you should submit the Episodic Generator addendum. And if you are receiving hazardous waste from VSQGs under the control of the same person, along with the Site Identification Form you should submit the LQG Consolidation of VSQG Hazardous Waste addendum.

WHERE SHOULD I SEND MY COMPLETED FORM?

Click [here](#) to find access to a contact list containing the address for your State or EPA Regional Office where you should send your completed Site ID Form. The list contains contact names, addresses, phone numbers, and e-mail addresses that you can use to obtain additional information.

Many States use the forms included in this document; some also require additional information. Other States require that you complete and submit a State-specific form. Information about which form to use is included with the contact list located at the web page noted above. Even if you use the included form, you should check with your State to determine if you need to submit additional information. Also, contact your State if you have any questions about your submission.

After your completed Site ID Form for Obtaining an EPA Identification number or for Obtaining an Electronic Manifest Broker is received and processed, you will be sent a written acknowledgement that will include your EPA Identification Number. You must use this number on all communications with the EPA regarding your regulated waste activities for this site.

INSTRUCTIONS FOR FILLING OUT THE RCRA SUBTITLE C SITE IDENTIFICATION FORM

Type or print, in black ink, an “X” in all items that apply (if “Yes”, type or print an “X” in the “Y” box, if “No”, type or print an “X” in the “N” box) and then type or print an “X” in all other boxes that apply. In Item 19, provide the required ink signatures. Signatures must be original. Stamped or photocopied signatures are not acceptable. Enter your site’s EPA Identification Number in the top left-hand corner on all pages of the form; for an initial notification for this site, leave the EPA identification Number blank. Use Item 18 – Comments to clarify or provide additional information for any entry. When entering information in the comments section, enter the item number and box letter to which the comment refers. If you must use additional sheets for comments, enter your site’s EPA Identification Number in the top left-hand corner of each sheet.

ITEM 1 – REASON FOR SUBMITTAL

Place an “X” in the appropriate box to indicate whether you are submitting this form to obtain or update an EPA ID Number for an on-going regulated activity; as a component of the Hazardous Waste Report; to notify that regulated activity is no longer occurring at your site; to obtain or update an EPA ID Number for conducting electronic manifest broker activities; or as a component of a First or a Revised Hazardous Waste Part A Permit Application.

OBTAINING OR UPDATING AN EPA ID NUMBER FOR AN ON-GOING REGULATED ACTIVITY THAT WILL CONTINUE FOR A PERIOD OF TIME. (INCLUDES HSM ACTIVITY)

- If your waste activity is regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA) and the rules promulgated pursuant to the Act (specifically 40 CFR Parts 260-299), you must submit this form to notify the appropriate State or EPA Regional Office of your regulated waste activities and **obtain an EPA Identification Number**.

- If you are an eligible academic entity opting into 40 CFR Part 262, Subpart K for managing laboratory hazardous wastes **AND** you have never submitted site identification information, you must submit this form to notify the appropriate State or EPA Regional Office of your activities.

NOTE	You <u>must</u> check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262, Subpart K in order for you to notify.
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- If you are a recognized trader arranging for export or import of hazardous waste, including those managed under the alternate standards of 40 CFR Parts 266 and 273; or an exporter or importer of spent lead acid batteries (SLABs), you must submit this form to notify the appropriate State or EPA Regional Office of your activities.
- You must use this form to **submit a subsequent notification** if your site already has an EPA Identification Number and you wish to change information (e.g., generator status, new site contact person, new owner, new mailing address, new regulated waste activity, etc.).
- If you have previously submitted site identification information and are notifying (or re-notifying) that you will begin managing, are managing, or have stopped managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), you must submit this form, pursuant to 40 CFR 260.42, to notify the appropriate State or Regional Office of your activities.

NOTE	You <u>must</u> check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions in order for you to notify.
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- If you are a very small quantity generator (VSQG), previously called conditionally exempt small quantity generator (CESQG), taking advantage of the episodic generation provision at 40 CFR 262.232 (a), you must submit this form to report your episodic event.
- You must use this form to if you are a small quantity generator (SQG) re-notifying, beginning in 2021 and every four (4) years thereafter, unless a state program has more frequent reporting/notification requirements (See 40 CFR 262.18).
- You must use this form if you are a large quantity generator (LQG):
 - Consolidating wastes from VSQGs under the control of the same person. (See 40 CFR 262.17 (f)). Such LQGs must complete the Addendum to the Site Identification Form: LQG Consolidation of VSQG Hazardous Waste, and identify the RCRA Identification Number of the VSQG (if applicable), name, address, emergency contact phone number and contact name of every VSQG that they are receiving hazardous wastes from.
 - Closing either a waste accumulation unit (optional) or their facility, both prior to closing and after conducting closure performance operations (See 40 CFR 262.17 (a)(8)).

SUBMITTING AS A COMPONENT OF THE HAZARDOUS WASTE REPORT

If you are required to submit a Hazardous Waste Report indicating the amount of hazardous waste you generate, treat, recycle, dispose, on-site or ship off-site for subsequent treatment, recycling and disposal, or receive from off-site, you must fill out this form. A Site ID Form submitted with a Hazardous Waste Report is equivalent to a subsequent notification.

- *Site was a TSD facility and/or generator of ≥ 1,000 kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State Equivalent LQG regulations)*

The purpose of this check box is to distinguish between sites that meet the criteria and are required to file a report versus those who file voluntarily or by State-only requirement but were not a treatment, storage, and disposal facility (TSDF) or a Large Quantity Generator (LQG) during the report year. Sites required to file the report should place an "X" in this box, while non-LQG/TSD sites should not. For more information about who must file a report, refer to the [Who Must File a Hazardous Waste Report](#) section.

NOTIFYING THAT REGULATED ACTIVITY IS NO LONGER OCCURRING AT YOUR SITE

If you are no longer conducting ANY RCRA Subtitle C federal or state regulated hazardous waste activities, listed on the Site Identification Form, then you can use this Reason for Submittal to deactivate your EPA ID number.

OBTAINING OR UPDATING AN EPA ID NUMBER FOR CONDUCTING ELECTRONIC MANIFEST BROKER ACTIVITIES

If you are requesting an EPA ID in order to create and broker manifest transactions for handlers of hazardous waste, then select this Reason for Submittal. An Electronic Manifest Broker is considered a user of the electronic manifest system that has a contractual relationship and elects to use the system to obtain, complete and transmit an electronic manifest form supplied by the EPA electronic manifest system for handlers of hazardous wastes. This designation is for users of the electronic manifest system, defined in 40 CFR 260.10 as a person that elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system.

SUBMITTING A NEW OR REVISED PART A (PERMIT) FORM

If your site is planning to treat, store, or dispose of hazardous waste on-site in a unit that is not exempt from obtaining a hazardous waste permit, you must submit this form as a component of the Part A Permit Application. Also, if the activity at this site (treatment, storage, or disposal) became newly regulated under RCRA Subtitle C and the rules promulgated pursuant to the Act (specifically 40 CFR Parts 260-299), you must submit this form as part of the Part A Permit Application. Also, you must submit a Revised Part A Permit Application to reflect changes that have occurred at your site, you must submit this form as part of your Revised Part A Permit Application.

ITEM 2 – SITE EPA ID NUMBER

Provide your EPA Identification Number in Item 2 **for this site**. The first two characters of the EPA Identification Number must be a valid State postal code. Be sure to include your EPA Identification Number at the top of all pages of the form (as well as on any attachments to the Site ID Form).

NOTE

If this is your initial notification for this site, leave the EPA Identification Number blank and proceed to Item 3.

ITEM 3 AND 4 – SITE NAME AND SITE LOCATION ADDRESS

Provide the legal name of your site and a complete location address. Please note that the address you give for Item 4, Site Location Address, must be a physical address, not a post office box or route number. Only foreign hazardous waste transporters, with their headquarters located outside the U.S., may provide a Site Location Country outside of the U.S.

NOTE

A new EPA Identification Number is **required** if you change the location of your site

ITEM 5 – SITE MAILING ADDRESS

Provide the Site Mailing Address. If the Mailing Address and the Site Location Address (Item 4) are the same, you can check the “Same as Location Address” checkbox.

ITEM 6 – SITE LAND TYPE

Place an “X” in the box that **best describes** the land type of your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site’s Land Type could be described as Municipal **and** another Land Type, such as County, District, or Tribal, do not place an “X” in Municipal. Instead, choose the other appropriate Land Type. (For example, if your site’s Land Type is both Municipal and County, you would place an “X” in the box for County.) You may explain this in Item 18 – Comments.

Tribal—The land which your site is on belongs to one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at:

<http://www.epa.gov/tribal/wherelyoulive/tribes-a-z.htm>.

ITEM 7 – NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE(S)

Box A (Primary) must be completed. Completing Boxes B-D is recommended, if applicable.

BOX A

Provide the North American Industry Classification System (NAICS) code that best describes your site’s **primary** business production process for your products or services. Referencing the latest version of

NAICS codes, use the 6-digit code (most specific description) if available for your business; if not, use the 5-digit code; do not enter any four (4) or less digit codes.

Check with your accounting or business staff to determine your NAICS code(s); the NAICS code is used in tax reporting and other business reports. You can obtain additional information about NAICS codes at <http://www.census.gov/eos/www/naics>.

BOXES B – D

List other NAICS codes that describe the other business production processes for your site. Referencing the latest version of NAICS codes, use the 6-digit code (most specific description) if available for your business; if not, use the 5-digit code; do not enter any four (4) or less digit codes.

NOTE

The Census Bureau has published NAICS Code effective January 1, 2017. Please verify that your NAICS codes are still applicable. You can obtain additional information about the 2017 NAICS codes at: <http://www.census.gov/eos/www/naics>

ITEM 8 – SITE CONTACT INFORMATION

Enter the name, title, business address, e-mail address, telephone number, extension, and fax number of the individual who should be contacted regarding the information submitted in the Site ID Form. A subsequent notification is recommended when the Site Contact Person changes. **Do not** enter other contact persons here; if there are other persons, who may be contacted about this submission, list them and their contact information in Item 18 – Comments. If the person completing this form is not the primary site RCRA hazardous waste contact, enter the primary site RCRA hazardous waste contact here and add the contact information for the person completing the form in Item 18 – Comments.

NOTE

This is NOT the Facility Permit Contact's information. The Facility Permit Contact information should be entered on the RCRA Hazardous Waste Part A Permit Application.

ITEM 9 – LEGAL OWNER AND OPERATOR OF THE SITE

This section should be used to indicate all owners and operators of this site. If your Reason for Submittal is for an Electronic Manifest Broker whose site of business is an office only, and you do not otherwise physically generate, treat, store, recycle or dispose of hazardous waste on site, you do not have to fill out this item.

A. NAME OF SITE'S LEGAL OWNER

Provide the name of your site's legal owner(s). This includes owner(s) of the building(s) and land. Please review these definitions:

Owner – The person who owns a RCRA site or part of a RCRA site. **Note:** This includes the owner(s) of the building(s) and/or land. This may be an individual, company, or business name. See **Person**.

Person – An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

DATE BECAME AN OWNER

Indicate the date on which the above entity became the owner of your site. Enter dates as in this example: For April 22, 2015, enter 04/22/2015. This is optional information.

OWNER TYPE

Place an “X” in the box that **best describes** the owner type for your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site’s Owner Type could be described as Municipal **and** another Owner Type, such as County, District, or Tribal, do not place an “X” in Municipal. Instead, choose the other appropriate Owner Type. (For example, if your site’s Owner Type is both Municipal and County, you would place an “X” in the box for County.) You may explain this in Item 18 – Comments.

Tribal - A member of one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at: <http://www.epa.gov/tribal/wherelyoulive/tribes-a-z.htm>.

LEGAL OWNER ADDRESS

Enter the address of the legal owner. If the address and the Location of Site (Item 4) are the same, you can check the “Same as Location Address” checkbox.

ADDITIONAL OWNER INFORMATION

Enter the e-mail, telephone number, extension, and fax number of the legal owner.

Use the Comments section to list any additional owners, their names, the dates they became owners, owner type, mailing address, and which owner(s), if any, are no longer owners since your last submission of this form. If necessary, attach a separate sheet of paper. Remember to enter your site’s EPA Identification Number in the top left-hand corner of each sheet.

B. NAME OF SITE’S LEGAL OPERATOR

Provide the name of your site’s operator. Please review these definitions:

Operator – The person responsible for the overall operation of a RCRA site. **Note:** This is the legal entity which controls the RCRA site operation rather than the plant or site manager. This is usually a company or business name, but may be an individual. See **Person**.

Person – An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

DATE BECAME AN OPERATOR

Indicate the date on which the above entity became the operator of your site. Enter dates as in this example: For April 22, 2015, enter 04/22/2015. This is optional information.

OPERATOR TYPE

Place an “X” in the box that **best describes** the operator type for your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site’s Operator Type could be described as Municipal **and** another Operator Type, such as County, District, or Tribal, do not place an “X” in Municipal. Instead, choose the other appropriate Operator Type. (For example, if your site’s Operator Type is both Municipal and County, you would place an “X” in the box for County.) You may explain this in Item 18 – Comments.

Tribal - A member of one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at: <http://www.epa.gov/tribal/wherelyoulive/tribes-a-z.htm>.

LEGAL OPERATOR ADDRESS

Enter the address of the legal operator. If the address and the Location of Site (Item 4) are the same, you can check the “Same as Location Address” checkbox.

ADDITIONAL OPERATOR INFORMATION

Enter the e-mail, telephone number, extension, and fax number of the operator.

Use the Comments section to list any additional operators, their names, the dates they became operators, operator type, mailing address, and which operator(s), if any, are no longer operators since your last submission of this form. If necessary, attach a separate sheet of paper. Remember to enter your site’s EPA Identification Number in the top left-hand corner of each sheet.

NOTE

A subsequent notification is recommended when the owner or operator of a site changes. Because an EPA Identification Number is site-specific, the new owner will keep the existing EPA Identification Number for that location. If your business moves to another location, the owner or operator must notify the State or EPA Regional Office of this change. Since your business has changed locations, a new EPA Identification Number will be assigned.

ITEM 10 – TYPE OF REGULATED WASTE ACTIVITY (AT YOUR SITE)

Place an “X” in box “Y” or box “N” as appropriate for all **current** activities at this site (**as of the date submitting the form**); complete any additional boxes as instructed. **Current** activities mean activities that are in effect when the form is submitted or those that the site plans to begin after EPA Identification Number assignment. The information you provide in Item 10 will be considered current as of the date you certify the form. If the site is no longer a generator as of the date you certify the form, you should mark the “N” (not a generator) box for Generator of Hazardous Waste.

10.A HAZARDOUS WASTE ACTIVITIES

NOTE

Listed below are the Federal generator status definitions. If, however, the State where your site is located has definitions different from the Federal definitions, you must use the State definitions.

10.A.1. GENERATOR OF HAZARDOUS WASTE

If you generate a hazardous waste that is listed in 40 CFR 261.31 through 261.33 or identified by one or more hazardous waste characteristic(s) contained in 40 CFR 261.21 through 261.24, place an “X” in the appropriate box for the quantity of hazardous waste that is generated per calendar month. The regulations for hazardous waste generators are found in 40 CFR Part 262—specifically 40 CFR 262.14 for very small quantity generators (VSQGs), 40 CFR 262.16 for small quantity generators (SQGs), and 40 CFR 262.17 for large quantity generators (LQGs). Consult these regulations and your State for details about how the regulations apply to your situation. Below is a brief description of the three types of hazardous waste generators.

If “Yes”, place an “X” in only one of the following – a, b, or c. Otherwise, place an “X” in the “N” box.

a. LQG: Large Quantity Generator

For purposes of providing information in this report, the site is a Large Quantity Generator (LQG) if the site generates **any** of the following amounts in a calendar month:

- (i) Generates, in any calendar month, (including quantities imported by importer site) 1,000 kilograms (2,200 pounds) or more of non-acute RCRA hazardous waste; **or**
- (ii) Generates, in a calendar month, more than 1 kilogram (2.2 pounds) of any RCRA acute hazardous waste listed in sections 261.31 or 261.33(e); **or**
- (iii) Generates, in any calendar month, more than 100 kilograms (220 pounds) of residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any RCRA acute hazardous waste listed in sections 261.31 or 261.33(e).

NOTE

If, in addition to being a LQG, you recycle hazardous wastes at your site, mark both this box and Item 10.A.6.

NOTE

Hazardous secondary material managed under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27) DOES NOT count towards your generator status. However, you must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions.

b. SQG: Small Quantity Generator

This site is a SQG if the site meets **all** of the following criteria:

- (i) Generates, in any calendar month, greater than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,200 pounds) of non-acute hazardous waste; **and**
- (ii) Generates, in any calendar month, less than or equal to 1 kilogram (2.2 pounds) of acute hazardous waste listed in sections 261.31 or 261.33(e); **and**

- (iii) Generates, in any calendar month, less than or equal to 100 kilograms (220 pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in sections 261.31 or 261.33(e).

c. VSQG: Very Small Quantity Generator:

This site is a VSQG if the site meets **all** of the following criteria:

- (i) Generates in any calendar month, less than or equal to 100 kilograms (220 pounds) of hazardous waste; **and**
- (ii) Generates in any calendar month, less than or equal to 1 kilogram (2.2 pounds) of acute hazardous wastes listed in sections 261.31, or 261.33(e); **and**
- (iii) Generates in any calendar month, less than or equal to 100 kilograms (220 pounds) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, or 261.33(e).

10.A.2. SHORT-TERM GENERATORS

Place an “X” in the “Y” box if the site is normally not a generator of hazardous waste, but is currently generating hazardous waste only as the result of a one-time, non-recurring, temporary event that is not related to normal production processes. In other words, short-term generators produce hazardous waste from a particular activity for a limited time and then cease conducting that activity. Short-term generators are not considered episodic generators because episodic generators (i.e., VSQGs and SQGs) regularly generate hazardous waste as part of their operations, but elevate to a higher generator category as a result of a planned or unplanned event. Examples of short-term generators include: (1) one-time highway bridge waste generation; (2) underground storage tank removals; (3) generation of off-specification or out-of-date chemicals at a site that normally doesn’t generate hazardous waste; (4) remediation or spill clean-up at sites with no previous RCRA EPA Identification Number; and (5) site or production process decommissions by a new operator. If you mark “Y”, you must provide an explanation of your short-term generation event in Item 18 –Comments. Otherwise, **place an “X” in the “N” box**.

10.A.3. MIXED WASTE GENERATOR

Place an “X” in the “Y” box if you are a generator of mixed waste (waste that is both hazardous and radioactive). Otherwise, **place an “X” in the “N” box**. RCRA defines “mixed waste” as waste that contains both hazardous waste and source, special nuclear, or by-product material subject to the Atomic Energy Act (AEA), RCRA Section 1004(41), 42 U.S.C. 6903 (63 FR 17414; April 9, 1998).

10.A.4. TREATER, STORER, OR DISPOSER OF HAZARDOUS WASTE

If you treat, store, or dispose of hazardous waste, **place an “X” in the “Y” box**. A RCRA Hazardous Waste Part B Permit is **required** for this activity. Contact the appropriate office for your State for more information. The Federal regulations for owners and operators of permitted treatment, storage, and disposal facilities (TSDFs) are found in 40 CFR Parts 264, 265, 266, and 270.

Place an “X” in the “N” box if any of the following conditions are true for your facility:

- This facility does not receive hazardous waste from other generators and ships all waste off-site for management within the regulatory timeframe.
- This facility is only involved with on-going post-closure activities, corrective actions under the Hazardous and Solid Waste Amendments of 1984 (HSWA), or a consent order under a non-traditional permit or without a RCRA permit being required.
- Receives waste from off-site but does not store greater than 10 days before re-shipping (i.e., transfer facility).

NOTE

If your site is a destination facility for universal wastes in addition to being a TSDF for other RCRA hazardous wastes, place an "X" in the "Y" box for both this box **and** Item 11.B.2.

10.A.5. RECEIVES HAZARDOUS WASTE FROM OFF-SITE

If you received hazardous waste from another site, whether this waste was received as a commercial transaction or waste received from a restricted group of off-site generators, **place an "X" in the "Y" box**. Otherwise, **place an "X" in the "N" box**. Item 10.A.5 "Receives Hazardous Waste from Off-site" is not for transfer facilities. If you are a transfer facility receiving hazardous waste from off-site, you should mark item 11.A.1.b (Transfer Facility).

10.A.6. RECYCLER OF HAZARDOUS WASTE

Place an "X" in the "Y" box if you recycle regulated hazardous wastes (recyclable materials) at your site. Otherwise, **place an "X" in the "N" box**. If you mark "Y", then mark the subsequent box that identifies whether you recycle regulated hazardous wastes, with or without storage prior to recycling. The Federal regulations for owners and operators of sites that recycle hazardous waste are found in 40 CFR 261.6. You also may be subject to other Federal and State regulations; in some cases, a permit is required.

NOTE

The 2016 Hazardous Waste Generator Improvements Final Rule requires that both facilities that do store prior to recycling and facilities that do not store prior to recycling submit a Hazardous Waste Report.

If your site, in addition to being a recycling site for hazardous waste, treats, stores, or disposes of hazardous waste, place an "X" in the "Y" box for both this box **and** Item 10.A.4. If your site is a destination facility for universal wastes in addition to being a recycling site for other RCRA hazardous wastes, place an "X" in the "Y" box for both this box **and** Item 11.B.2.

10.A.7. EXEMPT BOILER AND/OR INDUSTRIAL FURNACE

If "Yes", place an "X" in all that apply. Otherwise, place an "X" in the "N" box.

a. Small Quantity On-Site Burner Exemption

You burn small quantities of hazardous waste in an on-site boiler or industrial furnace in accordance with the conditions in 40 CFR 266.108, place an "X" in the box to indicate that you qualify for the Small Quantity On-Site Burner Exemption.

b. Smelting, Melting, and Refining Furnace Exemption

You process hazardous wastes in a smelting, melting, or refining furnace solely for metals recovery, as described in 40 CFR 266.100(d), or to recover economically significant amounts of precious metals, as described in 40 CFR 266.100(g), or if you process hazardous wastes in a lead recovery furnace to recover lead, as described in 40 CFR 266.100(h), place an "X" in the box to indicate that you qualify for the Smelting, Melting, and Refining Furnace Exemption.

10.B. WASTE CODES FOR FEDERALLY REGULATED HAZARDOUS WASTES

Please list the waste codes of the Federal hazardous wastes (described in 40 CFR Part 261) handled at your site. List them in the order they are presented in the regulations using the appropriate 4-digit code(s) (e.g., D001, D003, F007, U112).

NOTE

If you handle more hazardous wastes than will fit under Item 10.B, please continue under Item 18 – Comments or on an extra sheet. Remember to include your EPA Identification Number on the top of each page. If you handle a large number of codes, you may copy the list in this document and mark the ones that you handle. Attach any additional sheets to the Site ID Form. Remember to include your EPA Identification Number on the top of each page.

LIST

Click [here](#) for a list of the nationally-defined Hazardous Waste Codes.

10.C. WASTE CODES FOR STATE-REGULATED (NON-FEDERAL) HAZARDOUS WASTES

If you manage State-regulated hazardous wastes that have a State waste code, enter the appropriate code(s) in the box(es) provided. Please list the waste codes of the State-regulated hazardous wastes handled at your site in the order they are presented in the regulations.

NOTE

If you handle more hazardous wastes than will fit under Item 10.C, please continue under Item 18 – Comments or on an extra sheet. Remember to include your EPA Identification Number on the top of each page.

ITEM 11– ADDITIONAL REGULATED WASTE ACTIVITIES**11.A OTHER WASTE ACTIVITIES**

Place an “X” in the “Y” or “N” box as appropriate for all additional current regulated waste activities at this site **(as of the date submitting the form)**; complete any additional boxes as instructed. **Current** activities mean activities that are in effect when the form is submitted or those that the site plans to begin after EPA Identification Number assignment. The information you provide in Item 11 will be considered current as of the date you certify the form

11.A.1. TRANSPORTER OF HAZARDOUS WASTE

If “Y”, place an “X” in all that apply. Otherwise, place an “X” in the “N” box.

a. Transporter

You transport hazardous waste within the U.S. The Federal regulations for hazardous waste transporters are found in 40 CFR Part 263.

b. Transfer Facility

You are a hazardous waste transfer facility, at your site, if you hold manifested hazardous waste(s) at your site for a period of ten (10) days or less while the waste is in transit. The Federal regulations for hazardous waste transfer facilities are found in 40 CFR 263.12.

11.A.2. UNDERGROUND INJECTION CONTROL

If you generate, treat, store, or dispose of hazardous waste and place the waste or its residuals into an underground injection well (e.g., a Class I well) located at your site, **place an “X” in the “Y” box**. Otherwise, **place an “X” in the “N” box**. The Federal regulations for owners and operators of underground injection wells are found in 40 CFR Part 148.

11.A.3. UNITED STATES IMPORTER OF HAZARDOUS WASTE

Place an “X” in the “Y” box if you import hazardous waste from a site located in a foreign country into the U.S. Refer to 40 CFR 262.10(e) and 40 CFR 262.84 for additional information. Otherwise, **place an “X” in the “N” box**.

11.A.4. RECOGNIZED TRADER

Place an “X” in the “Y” box if you are a recognized trader, defined in 40 CFR 260.10 as a person domiciled in the United States, who acts to arrange and facilitate transboundary movements of wastes destined for recovery or disposal operations, either by purchasing from and subsequently selling to United States and foreign facilities, or by acting under arrangements with a United States waste facility to arrange for the export or import of the waste. Otherwise, **place an “X” in the “N” box**. Mark all that apply.

- a. Importer**
- b. Exporter**

11.A.5. IMPORTER/EXPORTER OF SPENT LEAD-ACID BATTERIES (SLABS) UNDER 40 CFR PART 266 SUBPART G

Place an “X” in the “Y” box if you are an importer or exporter of spent lead-acid batteries (SLABS) being managed domestically under 40 CFR 266 Subpart G to obtain an EPA Identification number (see 40 CFR 266.80(a)(6), (8) - (10)). Otherwise, place an “X” in the “N” box. Mark all that apply.

- a. Importer
- b. Exporter

11.B UNIVERSAL WASTE ACTIVITIES

Refer to your State-specific requirements and definitions for universal waste. Also, refer to 40 CFR 261.9 and 40 CFR Part 273 for the Federal regulations covering universal waste. **Complete parts 1 and 2.**

11.B.1 LARGE QUANTITY HANDLER OF UNIVERSAL WASTE (LQH UW)

You are a Large Quantity Handler of Universal Waste (LQH UW) if you accumulate a total of 5,000 kg or more total of universal wastes (batteries, pesticides, mercury-containing equipment, or lamps – calculated collectively) at any time. This designation is retained through the end of the calendar year in which the 5,000 kg limit is met or exceeded. Place an “X” in the “Y” box, then place an “X” in the appropriate box(es) to indicate the type(s) of universal wastes managed at your site. Otherwise, place an “X” in the “N” box. If your State has other additional universal wastes, indicate what they are by placing an “X” in the corresponding box(es) (11.B.1.e - g).

11.B.2 DESTINATION FACILITY FOR UNIVERSAL WASTE

Place an “X” in the “Y” box if you treat, dispose, or recycle universal wastes on-site. Otherwise, place an “X” in the “N” box. A hazardous waste permit is required if you treat or dispose of universal wastes; a permit may be required if you recycle universal wastes.

NOTE

If your site, in addition to being a destination facility for universal wastes, is also a TSDF for RCRA hazardous wastes, place an “X” in the “Y” box for both this **and** Item 10.A.4. In addition, if your site recycles RCRA hazardous wastes, Place an “X” in the “Y” box for both this **and** Item 10.A.6.

11.C. USED OIL ACTIVITIES

Place an “X” in the appropriate box(es) to indicate which used oil management activities are taking place at this site. Otherwise, place an “X” in the “N” box. The Federal regulations for used oil management are found in 40 CFR Part 279. Also, the facility should check with its State to find out if there are additional State-specific reporting requirements for used oil activities. **Complete all parts 1 through 4.**

11.C.1. USED OIL TRANSPORTER

Place an “X” in the “Y” box, then place an “X” in all that apply. Otherwise, place an “X” in the “N” box.

a. Transporter

You transport used oil within the U.S. The Federal regulations for used oil transporters are found in 40 CFR 279.40-47.

b. Transfer Facility (at your site)

You own or operate a used oil transfer facility. The Federal regulations for used oil transfer facilities are found in 40 CFR 279.40-47.

11.C.2. USED OIL PROCESSOR AND/OR RE-REFINER

Place an “X” in the “Y” box, then place an “X” in all that apply. Otherwise, place an “X” in the “N” box.

a. Processor

You process used oil. The Federal regulations for processors of used oil are found in 40 CFR 279.50-59.

b. Re-refiner

You refine used oil. The Federal regulations for re-refiners of used oil are found in 40 CFR 279.50-59.

11.C.3. OFF-SPECIFICATION USED OIL BURNER

Place an “X” in the “Y” box, to indicate that you are conducting this used oil management activity. Otherwise, place an “X” in the “N” box.

11.C.4. USED OIL FUEL MARKETER

Place an “X” in the “Y” box, then place an “X” in all that apply. Otherwise, place an “X” in the “N” box.

a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burners

You are a marketer who directs shipment of off-specification used oil to off-specification used oil burners. The Federal regulations for used oil fuel marketers are found in 40 CFR 279.70-75.

b. Marketer Who First Claims the Used Oil Meets the Specification

You are the first to claim that used oil meets the used oil specifications established in 40 CFR 279.11.

NOTE	If either of these boxes is marked, you must also notify (or have previously notified) as a used oil transporter (11.C.1), used oil processor/re-refiner (11.C.2), or off-specification used oil fuel burner (11.C.3), unless you are a used oil generator. (Used oil generators are not required to notify.)
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ITEM 12 – ELIGIBLE ACADEMIC ENTITIES WITH LABORATORIES

NOTE

40 CFR 262, Subpart K must be in effect in your State in order to report as an eligible academic entity with laboratories. See EPA's website for more information about these regulations at <http://www2.epa.gov/hwgenerators/regulations-hazardous-waste-generated-academic-laboratories>

Subpart K is an optional alternative set of requirements for eligible academic entities with laboratories. Certain generators (i.e., eligible academic entities as defined in 40 CFR 262.200) are eligible to operate under Subpart K for management of their hazardous wastes in laboratories in lieu of 40 CFR 262.15 (or 40 CFR 262.14 for VSQGs). Eligible academic entities with laboratories that generate hazardous waste that elect to opt into Subpart K, are currently operating under Subpart K, or subsequently withdraw from Subpart K must complete this section to meet the notification requirements of this Subpart. Refer to 40 CFR 262.203 and 40 CFR 262.204.

NOTE

Eligible academic entities with laboratories must complete a separate Site ID Form for each site (i.e., EPA Identification Number) that is managing hazardous waste under Subpart K. All laboratories with the same EPA Identification Number will be regulated under this Subpart. If eligible academic entities with laboratories withdraw from Subpart K, all laboratories with the same EPA Identification Number associated with the withdrawal from Subpart K will be regulated under 40 CFR 262.15 (or 40 CFR 262.14 for VSQGs).

12.A OPTING INTO OR CURRENTLY OPERATING UNDER 40 CFR PART 262, SUBPART K FOR THE MANAGEMENT OF HAZARDOUS WASTES IN LABORATORIES

Place an “X” in the “Y” box, if you are an eligible academic entity and you elect to opt into or are currently operating under 40 CFR 262, Subpart K for the hazardous wastes generated in your laboratories. Otherwise, **place an “X” in the “N” box**. If you mark “Y” for this box, you must place an “X” in at least one of the following to indicate your type of eligible academic entity. **Place an “X” in all that apply**:

a. College or University

You are an eligible college or university if you are a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university

You are an eligible teaching hospital if you are a hospital that trains students to become physicians, nurses, or other health personnel and is either: (1) owned by a college or university, or (2) has a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

You are an eligible non-profit institute if you are an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3) and is either: (1) owned by a college or university, or (2) has a formal written affiliation agreement with a college or university that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement.

12.B WITHDRAWING FROM 40 CFR 262, SUBPART K FOR THE MANAGEMENT OF HAZARDOUS WASTES IN LABORATORIES

Place an “X” in the “Y” box, if you have previously elected to opt into 40 CFR Part 262, Subpart K and are now withdrawing from participation in this optional set of alternative requirements for hazardous waste generation in laboratories. Withdrawing generators will automatically revert to regulation under 40 CFR 262.15 requirements (or 40 CFR 262.14 for VSQGs). If marking “Y” for this box, please include comments in Item 18 – Comments that explain your reasons for withdrawing from Subpart K. Otherwise, **place an “X” in the “N” box**.

ITEM 13 – EPISODIC GENERATION

Place an “X” in the “Y” box, if you are a VSQG or SQG notifying that you are taking advantage of the episodic generator event provision in 40 CFR 262.232. This provision allows a VSQG or an SQG to generate additional quantities of hazardous waste—temporarily exceeding its normal generator category limits—and still maintain its existing generator category, provided it complies with the specified conditions identified in 40 CFR 262.232 (a) and (b). Otherwise, **place an “X” in the “N” box**.

NOTE If you mark “Y,” you must fill out the Addendum to the Site ID Form: Episodic Generator.

The generator may use this provision once per calendar year with the ability to petition for a second event. However, if the first event is planned, the petition must be for a second event that is unplanned, or vice-versa. It is recommended you review the regulation at 40 CFR 262.233 to understand what is required of a generator should you choose to take advantage of this petition process.

Although not inclusive, examples of planned episodic events include tank cleanouts, short-term construction projects, short-term site remediation, equipment maintenance during plant shutdowns, removal of excess chemical inventories, and site and production process decommissions by a new operator. Unplanned episodic events, which EPA expects would be less frequent, include production process upsets, product recalls, accidental spills, or “acts of nature,” such as a tornado, hurricane, or flood. If you are taking advantage of this provision, you must complete the Addendum to the Site Identification Form for Episodic Generation. Information to be completed includes:

- the type of episodic event (i.e., planned or unplanned),
- the name and telephone number of an emergency contact at the site,

- the beginning or start date of the episodic event, and expected completion date (no later than 60 days from beginning date),
- the reason for the episodic event (event description),
- identification of the applicable federal waste codes (and state waste codes, if applicable), and
- the estimated total quantity of hazardous wastes that will be generated as a result of the episodic event.

ITEM 14 – LQG CONSOLIDATION OF VSQG HAZARDOUS WASTE

The 2016 Hazardous Waste Generator Improvements Final Rule allows LQGs to receive and consolidate hazardous wastes from VSQGs if the VSQGs are under the control of the same “person” as defined in 40 CFR 260.10.

NOTE	<p>“Control,” for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise. Contractors who operate generator facilities on behalf of a different person as defined in 40 CFR 260.10 are not be deemed to “control” such generators.</p> <p>If you mark “Y,” you must fill out the Addendum to the Site ID Form: LQG Consolidation of VSQG Hazardous Waste.</p>
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Place an “X” in the “Y” box, if you are an LQG taking advantage of the provision found at 40 CFR 262.17 (f), you must notify (or re-notify) EPA or your authorized State. Otherwise, **place an “X” in the “N” box**. Information to be completed for each VSQG you are receiving hazardous waste from including:

- EPA Identification number (if applicable),
- the site name,
- address,
- contact name, and
- telephone number.

ITEM 15 – NOTIFICATION OF LQG SITE CLOSURE FOR A CENTRAL ACCUMULATION AREA (CAA) OR ENTIRE FACILITY

The 2016 Hazardous Waste Generator Improvements Final Rule requires LQGs to notify EPA no later than 30 days prior to closing their facility. They must also notify EPA within 90 days after closing the facility and having complied with the closure performance standards of 40 CFR 262.17 (a)(8) (iii) or 40 CFR 262.17 (a)(8)(iv), or notify EPA that they cannot meet the closure performance standards. Optionally, an LQG may notify that they are closing a central accumulation area.

Place an “X” in the “Y” box, then **complete the appropriate boxes: 15.A – D**. Otherwise, **place an “X” in the “N” box**.

15.1 CENTRAL ACCUMULATION AREA (CAA) OR ENTIRE FACILITY

Indicate if you are closing a central accumulation area or are closing the entire facility.

15.2 EXPECTED CLOSURE DATE

Provide the date (mm/dd/yyyy) that you expect to close the CAA or the entire facility.

15.3 REQUESTING NEW CLOSURE DATE

If you cannot complete the closure of your facility (or central accumulation area) within 90 days of starting the closure process, indicate the new closure date (mm/dd/yyyy). Explain in Item 18 - Comment why you are requesting the additional time.

15.4 DATE CLOSED

Provide the date (mm/dd/yyyy) that the facility or CAA closed.

a. In compliance with the closure performance standards 40 CFR 262.17(a)(8):

Indicate if the facility or CAA closed in compliance with the closure performance standards in 40 CFR 262.17(a)(8).

b. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8):

Indicate if the facility or CAA closed but failed to meet closure performance standards in 40 CFR 262.17(a)(8).

ITEM 16 – NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL (HSM) ACTIVITY**NOTE**

40 CFR 260.42 must be in effect in your State in order to manage hazardous secondary material under these regulations.

16.A NOTIFICATION OF MANAGEMENT OF HAZARDOUS SECONDARY MATERIAL

Place an “X” in the “Y” box if you are notifying under 40 CFR 260.42 that you will begin managing, are still managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27). Otherwise, place an “X” in the “N” box.

NOTE

If you mark “Y,” you must fill out the Addendum to the Site ID Form: Notification of Hazardous Secondary Material Activity.

16.B NOTIFICATION OF RECYCLING OF HAZARDOUS SECONDARY MATERIAL

Place an “X” in the “Y” box if you are submitting a legitimate recycling notification under 40 CFR 260.43(a)(4)(iii). Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from hazardous waste regulations must be legitimate. You must notify EPA if the product of your recycling process has levels of hazardous constituents that are not comparable to a legitimate product or intermediate, but the recycling is still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. Documentation of legitimacy must be maintained on-site for three years. Provide additional information regarding your recycling in Item 18 - Comments. Otherwise, place an “X” in the “N” box. Notification is not required if the product of the recycling process is comparable to a legitimate product or intermediate per 40 CFR 260.43(a)(4)(i) or (ii).

ITEM 17 – ELECTRONIC MANIFEST BROKER

Place an “X” in the “Y” box if you are a person as defined in 40 CFR 260.10 that elects to use the electronic manifest system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system under a contractual relationship with a hazardous waste generator. Otherwise, place an “X” in the “N” box.

ITEM 18 – COMMENTS

Use this section as needed to provide additional information for Items 1 through 17. Include the item number and box letter (if any) for each comment you make. You may attach additional sheets if needed. Remember to include your EPA Identification Number on the top of each page.

ITEM 19 – CERTIFICATION

This certification must be signed and dated by the generator(s), owner(s), operator(s), or authorized representative(s) of the site. See 40 CFR 270.11 for more information on signatories in general. An “authorized representative” is a person responsible for the overall operation of the site or an operational unit (i.e., a plant manager or superintendent, or a person of equivalent responsibility). To qualify as an “authorized representative,” generator, owner, operator, or responsible official must submit a written authorization to the Director in an authorized state or the EPA Regional Director in non-authorized states.

NOTE

All Site ID Form submissions must include this certification to be complete.

ADDENDUM TO THE SITE IDENTIFICATION FORM: NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL (HSM) ACTIVITY

YOU MUST FILL OUT THIS ADDENDUM IF:

- You are located in a State that allows you to manage excluded hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27), (or state equivalent) **AND**
- You are or will be managing excluded HSM in compliance with 40 CFR 260.30, 261.4(a)(23), (24), or (27) (or state equivalent) or have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section. Note: If your facility was granted a solid waste variance under 40 CFR 260.30 prior to July 13, 2015, your management of HSM under 40 CFR 260.30 is grandfathered under the previous regulations and you are not required to notify for the HSM management activity excluded under 40 CFR 260.30. See EPA's website for more information about these regulations at <https://www.epa.gov/hw>.

Complete all Items 1 and 2.

NOTE	<p>You must be managing excluded hazardous secondary material in compliance with 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27) (or State equivalent). <u>Do not include any information regarding your hazardous wastes in this section.</u> See 80 FR 1694 or https://www.epa.gov/hw for more information on these exclusions.</p> <p>You must submit a completed Site ID Form, including this Addendum, prior to operating under the exclusion(s) and by March 1 of each even-numbered year thereafter to your regulatory authority using the Site ID Form as pursuant to 40 CFR 260.42. Persons who must satisfy this notification requirement can submit this information at the same time as their Hazardous Waste Report (which is also due by March 1 of each even-numbered year).</p> <p>If you stop managing hazardous secondary material in accordance with the exclusion(s) and do not expect to manage any amount of hazardous secondary material under the exclusion(s) for at least one year, you must also submit a completed Site ID Form, including this Addendum, within thirty (30) days pursuant to 40 CFR 260.42.</p>
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ITEM 1 – REASON FOR NOTIFICATION

Place an “X” in the box for the reason that applies to you:

**FACILITY WILL BEGIN MANAGING EXCLUDED HAZARDOUS SECONDARY MATERIAL AS OF
(MM/DD/YYYY)**

Place an “X” in this box if you are notifying that you will begin managing hazardous secondary material under the exclusion(s).

- Facilities must notify prior to operating under the exclusion(s).
- If placing an “X” in this box, list the date (mm/dd/yyyy) when you will begin managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27).

NOTE

If the facility had previously notified that it will stop managing hazardous secondary material in the past but will now begin anew, list the next planned start date.

**FACILITY IS STILL MANAGING EXCLUDED HAZARDOUS SECONDARY MATERIAL/RE-
NOTIFYING AS REQUIRED BY MARCH 1 OF EACH EVEN-NUMBERED YEAR**

Place an “X” in this box if you are re-notifying that you are still managing hazardous secondary material under the exclusion(s).

- Facilities must re-notify by March 1st of each even-numbered year.
- If placing an “X” in this box, you do not have to list a date.

NOTE

You must have previously notified that you began managing hazardous secondary material in order to check this box.

**FACILITY HAS STOPPED MANAGING EXCLUDED HAZARDOUS SECONDARY MATERIAL AS OF
(MM/DD/YYYY) AND IS NOTIFYING AS REQUIRED**

Place an “X” in this box, if you are notifying that you have stopped managing hazardous secondary material under the exclusion(s) and do not expect to manage any amount of hazardous secondary material for at least one year (pursuant to 40 CFR 260.42(b)). List the date when you stopped managing hazardous secondary material. Enter the date in “mm/dd/yyyy” format.

- Facilities must notify within 30 days of when they stopped managing hazardous secondary material. You are considered to have stopped managing hazardous secondary material if: (1) you stop managing hazardous secondary material completely (e.g., you cease operations); (2) you choose to manage the hazardous secondary material as hazardous waste; (3) you undergo closure and request release from financial assurance per 40 CFR 261.143(h) or 40 CFR 264.143; or (4) you temporarily suspend management of hazardous secondary material for at least one year.

- Only place an “X” in this box if you have stopped managing all hazardous secondary material under the exclusion(s). For example, if your facility only stopped managing one hazardous secondary material, but continued to manage another hazardous secondary material, you would leave this box blank since your facility continues to manage some amount of hazardous secondary material.
- If you submit a notification that you have stopped managing hazardous secondary material, you do not need to re-notify (unless you choose to manage hazardous secondary material again, in which case you would have to submit a notification prior to managing). After submitting a stop notification, you can leave the Addendum blank for subsequent submissions, including any subsequent Hazardous Waste Report submissions.

ITEM 2 – DESCRIPTION OF EXCLUDED HAZARDOUS SECONDARY MATERIAL (HSM) ACTIVITY

In the table provided on this Addendum to the Site Identification Form, list your appropriate facility code, each waste code for the hazardous secondary material you manage, the estimated and actual quantities, in short tons, for each hazardous secondary material, and the appropriate land-based code for how you manage the hazardous secondary material. Do not include any information regarding your hazardous wastes in this section. See examples below on how to answer this question.

a. Facility Code

Using the nationally-defined Facility Codes enter the appropriate 2-digit code(s) that correctly describes your facility. If more than one code applies to your facility, enter each 2-digit code on a separate row. Each hazardous secondary material should be reported by facility code.

LIST

Click [here](#) for a list of the nationally-defined Facility Codes.

b. Waste Code(s) for HSM

Use the box provided to enter the appropriate 4-digit hazardous waste code(s) that would apply to your hazardous secondary material if you managed it as hazardous waste (i.e., the waste code(s) that would apply if you did not manage your material in accordance with 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27).

NOTE

If you list more codes or manage more hazardous secondary material than will fit in the table under Item 2, please continue the Site Identification Form under Item 18 – Comments, or on an extra sheet. Remember to include your EPA Identification Number on the top of each page.

LIST

Click [here](#) for a list of the nationally-defined Hazardous Waste Codes.

c. Estimate Short Tons of Excluded HSM to be Managed Annually

In the box provided, enter your estimated quantity (using short tons) of hazardous secondary material you expect to manage annually. Convert all physical quantities (e.g., gallons, cubic yards, kilograms,

metric tons, etc.) to short tons (1 short ton = 2,000 pounds) and round to the nearest ton (no decimals).

NOTE

Your estimated quantity should be for the entire amount of hazardous secondary material to be reclaimed NOT just the quantity of constituent or product reclaimed.

d. Actual Short Tons of Excluded HSM Managed During the Most Recent Odd-Numbered Year

Report the quantity (using short tons) of each hazardous secondary material you actually managed during the most recent odd-numbered year. For example, if you are submitting this notification on February 20, 2018, enter the amount you actually managed during 2017 (i.e., the quantity you managed from January 1, 2017 to December 31, 2017). Convert all physical quantities (e.g., gallons, cubic yards, kilograms, metric tons, etc.) to short tons (1 short ton = 2,000 pounds) and round to the nearest ton (no decimals). If this is your initial notification, enter "0."

NOTE

Your actual quantity should be for the entire amount of hazardous secondary material that was sent for reclamation NOT just the quantity of constituent or product reclaimed.

e. Land-based Unit Code

Using the nationally-defined Land-based Unit Codes, enter in the 2-digit code that best describes the land-based unit you use or will use to manage the hazardous secondary material. If you do not use any land-based units, enter "NA." If you use the code "OT" (Other), please describe your land-based unit in Item 18 – Comments. If more than one land-based unit code applies to a hazardous secondary material, list it separately using another row.

LIST

Click [here](#) for a list of the nationally-defined Land-based Unit Codes.

EXAMPLES FOR REPORTING HAZARDOUS SECONDARY MATERIAL ACTIVITY**EXAMPLE 1**

A pharmaceutical manufacturer generates spent solvents that are characteristic for ignitability (D001). The manufacturer plans to manage spent solvents under 40 CFR 261.4(a)(23) and 261.4(a)(24) by sending some amount to a reclaimer within its own company and the rest off-site to a recycling facility within the U.S. The manufacturer will not manage any spent solvents in a land-based unit. Following the regulations, the manufacturer submits an initial notification prior to managing its spent solvents under the exclusions. The facility would report its hazardous secondary material activity as follows:

a. Facility code	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM managed during the most recent odd-numbered year	e. Land-based unit code
02	D001	15	0	NA
06	D001	40	0	NA

EXAMPLE 2

A steel manufacturer generates electric arc furnace dust and spent pickle liquor from one of its steel operations. The manufacturer sends electric arc furnace dust (K061) off-site to a recycling facility within the U.S. and reclaims spent pickle liquor (K062) on-site. Neither hazardous secondary material is managed in a land-based unit. The steel manufacturer has managed both hazardous secondary material under 40 CFR 261.4(a)(23) and 261.4(a)(24) for a number of years and it is now time to re-notify. The facility would report its hazardous secondary material activity as follows:

a. Facility code	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM managed during the most recent odd-numbered year	e. Land-based unit code
01	K062	60	52	NA
06	K061	20,000	22,468	NA

EXAMPLE 3

A RCRA-permitted recycling facility has been receiving and reclaiming spent solvents under 40 CFR 261.4(a)(23) and 261.4(a)(24) for a number of years. The facility receives and reclaims spent solvents from multiple hazardous secondary material generators, some of which are within the same company. No spent solvents are managed in a land-based unit. It is now time to re-notify. The facility would report its hazardous secondary material activity as follows:

a. Facility code	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM managed during the most recent odd-numbered year	e. Land-based unit code
03	D001; F002; F003; F005	6,000	7,533	NA
03	D001; D035; F002; F003	1,500	918	NA
07	D001; F002; F003; F005	3,000	3,509	NA
07	D001; D038; F002; F003	1,000	523	NA

EXAMPLE 4

A smelting operation generates furnace bricks that are characteristic for chromium (D007) and sends them off-site for recycling. Before shipping the bricks off-site, the facility manages some of the bricks in a containment building and the rest in a pile on the land. The facility has been managing the bricks under 40 CFR 261.4(a)(24) for a number of years and must now re-notify. The facility would report its activity as follows:

a. Facility code	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM managed during the most recent odd-numbered year	e. Land-based unit code
06	D007	200	235	NA
06	D007	115	126	PL

EXAMPLE 5

A RCRA-permitted intermediate facility has been managing wastewater treatment sludges from electroplating operations (F006) for the past seven years but, due to company consolidation, it will soon shut down. In accordance with 40 CFR 260.42, the facility notifies that it will stop managing hazardous secondary material. The facility would report its activity as follows:

a. Facility code	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM managed during the most recent odd-numbered year	e. Land-based unit code
08	F005	0	5,034	NA

ADDENDUM TO THE SITE IDENTIFICATION FORM: LQG CONSOLIDATION OF VSQGS HAZARDOUS WASTES

YOU MUST FILL OUT THIS ADDENDUM IF:

You must fill out this Addendum if you are an LQG taking advantage of the new provision at 40 CFR 262.17(f) allowing you to consolidate hazardous wastes from VSQGs under the control of the same person (as defined in 40 CFR 260.10). For each VSQG that the LQG is receiving hazardous waste from, the LQG must identify the EPA Identification Number, if applicable, the name of the site, the site address, contact name, phone number, and email address.

ITEM 1 – EPA ID NUMBER

Provide the EPA Identification Number for the VSQG whose waste you are consolidating, if applicable. A VSQG may have an EPA ID Number either because it's State requires it, or because it may have been an SQG or LQG at one time, or for another reason. If the VSQG does not have an EPA ID Number, leave this blank.

ITEM 2 – SITE NAME

Provide the legal name of the VSQG.

ITEMS 3-6 – SITE LOCATION

Provide the complete location address for the VSQG. Please note that the address must be a physical address, not a post office box or route number.

ITEM 7-9 –CONTACT INFORMATION

Enter the telephone number, name of the individual who should be contacted for information about the VSQG, and their email address.

ADDENDUM TO THE SITE IDENTIFICATION FORM: EPISODIC GENERATOR

YOU MUST FILL OUT THIS SECTION IF:

You must fill out this Addendum if you are a VSQG or SQG taking advantage of the provision in 40 CFR 262 Subpart L allowing you to generate additional quantities of hazardous waste—temporarily exceeding your normal generator category limits—and still maintain your existing generator category, if complying with the specified conditions identified at 40 CFR 262.232(a) and (b). These conditions include management standards, completing the event, and removing all hazardous waste from the site within sixty (60) days.

NOTE You cannot use this Addendum when submitting your Hazardous Waste Report.

Examples of planned episodic events include tank cleanouts, short-term construction projects, short-term site remediation, equipment maintenance during plant shutdowns, removal of excess chemical inventories, and site and production process decommissions by a new operator. Unplanned episodic events, which EPA expects would be less frequent, include production process upsets, product recalls, accidental spills, or “acts of nature,” such as a tornado, hurricane, or flood. Generators conducting episodic events must notify with the type of event (planned or unplanned), an emergency contact and phone number, the start and end date of the episodic event (must be sixty (60) days or fewer apart), a description of the event, federal and state waste codes of wastes being generated, and the expected amount of waste to be generated.

ITEM 1-2 – PLANNED/UNPLANNED EVENT

Indicate whether the event being conducted is planned or unplanned. Furthermore, indicate the reason for the planned or unplanned event. If none of the reasons listed apply, mark “Other” and describe the event in Item 18 - Comments.

ITEM 3-4 – EMERGENCY CONTACT INFORMATION

Provide an emergency contact phone number and contact name for the individual who should be contacted regarding the information relating to this episodic event.

ITEM 5-6 – BEGINNING AND END DATES

Provide the estimated start date and end date of the event. The event must be complete within sixty (60) days of the start date.

WASTE 1 – 3

For each waste stream produced as a result of the episodic event, provide a description of the waste generated, the estimated quantity generated, and the applicable federal and/or state hazardous waste codes. If necessary, attach a separate sheet of paper. Remember to enter your site’s EPA Identification Number in the top left-hand corner of each sheet.

7. WASTE DESCRIPTION

Provide a short narrative description of the hazardous waste, such as:

- General type;
- Source;
- Type of hazard; and
- Generic chemical name or primary hazardous constituents.

8. ESTIMATED QUANTITY

Provide an estimated quantity, in pounds, of hazardous waste to be generated as a result of the episodic event.

9. FEDERAL AND/OR STATE HAZARDOUS WASTE CODES

Provide the federal hazardous waste codes and/or the state hazardous waste codes for the hazardous wastes you expect to generate during the episodic event.

LIST

Click [here](#) for a list of the nationally-defined Hazardous Waste Unit Codes.

OTHER REFERENCES AND CODE LISTS

EXCLUDED WASTES

This section presents a partial list of excluded materials and wastes. This list includes materials excluded from the definition of solid waste in 40 CFR 261.4(a) and solid wastes excluded from the definition of hazardous waste in 40 CFR 261.4(b). In addition, it includes specific solid waste samples that are excluded from the definition of hazardous waste in 40 CFR 261.4(d)-(f). Finally, this list includes specific hazardous wastes, as described in 40 CFR 261.4(c), that are exempted from certain RCRA Subtitle C regulations.

Agricultural Waste Fertilizer §261.4(b)(2)	Drilling Fluid §261.4(b)(5)	Household Waste §261.4(b)(1)(i)-(ii)
Analytical Samples – A Sample Of Solid Waste Or A Sample Of Water, Solid, Or Air, Which Is Collected For The Sole Purpose Of Testing To Determine Its Characteristics Or Composition §261.4(d)	Excluded Scrap Metal Being Recycled §261.4(a)(13)	HTMR Condenser Residue §261.4(a)(11)
Arsenic Treated Wood and Wood Products §261.4(b)(9)	Fossil Fuel Emission Control Waste §261.4(b)(4)	In situ Mining Materials §261.4(a)(5)
Carbon Dioxide Stream Injected For Geologic Sequestration. Carbon Dioxide Streams That Are Captured And Transported For Purposes Of Injection Into An Underground Injection Wells, Including The Requirements in 40 CFR Parts 144 And 146 Of The Underground Injection Control Program Of The Safe Drinking Water Act §261.4(h)	Hazardous Secondary Material Being Remanufactured §261.4(a)(27)	Irrigation Return Flows §261.4(a)(3)
Cement Kiln Dust §261.4(b)(8)	Hazardous Secondary Materials Generated And Legitimately Reclaimed Under The Control Of The Generator §261.4(a)(23) and (24)	Kraft Mill Steam Stripper Condensates §261.4(a)(15)
Coking By-products §261.4(a)(10)	Hazardous Secondary Material That Is Generated And Then Transferred To A Verified Reclamation Facility For The Hazardous Secondary Material Purpose Of Reclamation §261.4(a)(24)	Leachate Or Gas Condensate Collected From Landfills Where Certain Solid Wastes Have Been Disposed §261.4(b)(15)
Comparable/Syngas Fuels §261.4(a)(16)	Hazardous Secondary Material Transferred Off-site to A Verified Recycler §261.4(a)(24)	Mining and Mineral Process Wastes §261.4(b)(7)
Domestic Sewage §261.4(a)(1)	Hazardous Secondary Material Used to Make Zinc Fertilizers, Provided That The Following Conditions Specified Are Satisfied §261.4(a)(20)	Mining Overburden §261.4(b)(3)
Dredged Material That Is Subject To The Requirements Of A Permit That Has Been Issued Under 404 Of The Federal Water Pollution Control Act (33 U.S.C. 1344) Or Section 103 Of The Marine Protection, Research, And Sanctuaries Act of 1972 (33 U.S.C. 1413) §261.4(g)		Non-terne plated <u>used oil filters</u> that are not mixed with wastes listed in subpart D of this part if these oil filters have been gravity hot-drained using one of the following methods: - §261.4(b)(13)
		Nuclear Material §261.4(a)(4)
		Oil Filters §261.4(b)(13)
		Petrochemical Recovered Oil §261.4(a)(18)
		Petroleum-contaminated Media and Debris §261.4(b)(10)
		Petroleum Refining §261.4(a)(12)

Pulping Liquor §261.4(a)(6)	Solvent-Contaminated Wipes Sent for Cleaning or Disposal §261.4(a)(26)	Used Oil Distillation Bottoms §261.4(b)(14)
Refrigerants §261.4(b)(12)	Spent Caustics from Petroleum Refining §261.4(a)(19)	Used Oil Re-refining Distillation Bottoms That Are Used As Feedstock To Manufacture Asphalt Products §261.4(b)(14)
Secondary Material Returned to Original Process §261.4(a)(8)	Spent Wood Preserving Solutions and Wastewaters §261.4(a)(9)	Wastes Generated in Storage Tanks, Transport Vehicles, Pipelines, or Manufacturing Process Units §261.4(c)
Secondary Material from Mineral Processing §261.4(a)(17)	Sulfuric Acid §261.4(a)(7)	Wastewater Point Source Discharge §261.4(a)(2)
Shredded Circuit Boards Being Recycled §261.4(a)(14)	Treatability Study Samples §261.4(e)	Zinc Fertilizers Made From Hazardous Wastes, Or Hazardous Secondary Material That Are Excluded Under Paragraph (a)(20) Of This Section §261.4(a)(21)
Solid Waste That Would Otherwise Meet The Definition Of Low-level Mixed Wastes (LLMW) Pursuant to §266.210 §261.4(b)(17)	Treatability Studies at Laboratories and Testing Facilities §261.4(f)	
Solvent-Contaminated Wipes, Except For Wipes That Are Hazardous Waste Due To The Presence Of Trichloroethylene, That Are Sent For Disposal Are Not Hazardous Waste From The Point Of Generation §261.4(b)(18)	Trivalent Chromium Waste §261.4(b)(6)	
	Used Cathode Ray Tubes (CRTs) §261.4(a)(22)	
	Used Chlorofluorocarbon Refrigerants From Totally Enclosed Heat Transfer Equipment §261.4(b)(12)	

DEFINITIONS

This section contains definitions of terms helpful for completing the form. For terms defined in the Code of Federal Regulations (CFR), the appropriate citation is provided.

ACCUMULATION – A site that does not hold RCRA Interim Status or a RCRA permit may accumulate hazardous waste for a short period of time before shipping it off-site. The waste must be accumulated in either tanks or containers; it may not be accumulated in surface impoundments.

Generators of more than 1,000 kilograms (kg; 2,200 pounds [lbs]) of hazardous waste per month may accumulate their waste for up to 90 days before shipping it off-site. Generators of 100 kg (220 lbs) to 1,000 kg (2,200 lbs) of hazardous waste per month may accumulate their waste for up to 180 days before shipping it off-site. If the nearest treatment, storage, disposal, or recycling facility to which they can send their waste is more than 200 miles away, they may accumulate their waste for 270 days. See 40 CFR 262.16 and 17.

ACT OR RCRA – The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Section 6901 *et seq.*

ACUTE HAZARDOUS WASTE – Any hazardous waste with an EPA hazardous waste code beginning with the letter “P” (40 CFR 261.33(e)) or any of the following “F” codes: F020, F021, F022, F023, F026, and F027 (40 CFR 261.31). These wastes are subject to stringent quantity standards for accumulation and generation (40 CFR 262.14 (a)(1) and 262.14 (a)(3)).

AUTHORIZED REPRESENTATIVE – The person responsible for the overall operation of the site or an operational unit (i.e., part of a site), e.g., superintendent or plant manager, or person of equivalent responsibility.

AUTHORIZED STATE – A State that has obtained authorization from the EPA to direct its own RCRA program.

BOILER – An enclosed device using controlled flame combustion and having the following characteristics:

- the unit has physical provisions for recovering and exporting energy in the form of steam, heated fluids, or heated gases;
- the unit’s combustion chamber and primary energy recovery section(s) are of integral design (i.e., they are physically formed into one manufactured or assembled unit);
- The unit continuously maintains an energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel;
- The unit exports and utilizes at least 75 percent of the recovered energy, calculated on an annual basis (excluding recovered heat used internally in the same unit, for example, to preheat fuel or combustion air or drive fans or feed water pumps); or
- The unit is one which the Regional Administrator has determined, on a case-by-case basis, to be a boiler, after considering the standards in 40 CFR 260.32.

BY-PRODUCT MATERIAL – A by-product material is: (1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material; and (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content (defined in the Atomic Energy Act of 1954).

CENTRAL ACCUMULATION AREA (CAA) – Central accumulation area means an on-site hazardous waste accumulation area subject to either 40 CFR 262.34(a) (or 262.34 (j) and (k) for Performance Track members of large quantity generators; or 40 CFR 262.34 (d)–(f) of small quantity generators. A central accumulation area at an eligible academic entity that chooses to be subject to this subpart must also comply with 40 CFR 262.211 when accumulating unwanted material and/or hazardous waste.

CODE OF FEDERAL REGULATIONS (CFR) – Codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters that usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas. The CFR title applicable for the Hazardous Waste Report is “40,” as in “40 CFR 262.10”.

CONFIDENTIAL BUSINESS INFORMATION (CBI) – Information a facility does not wish to make available to the general public for competitive business reasons. Confidential Business Information (CBI) may be claimed for certain information in your submittal. A claim may be made in accordance with 40 CFR Part 2, Subpart B.

DELISTED WASTE – Site-specific wastes excluded from regulation under 40 CFR 260.20 and 260.22. A waste at a particular generating site may be excluded by petitioning the EPA Administrator for a regulatory amendment. These wastes are listed in Appendix IX of 40 CFR Part 261.

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 or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

ELECTRONIC MANIFEST BROKER – A person as defined in title 40 CFR §260.10 that elects to use the electronic manifest system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system under a contractual relationship with a hazardous waste generator.

ELIGIBLE ACADEMIC ENTITY – A college or university, or a non-profit research institute that is owned by or has a formal written affiliation with a college or university, or a teaching hospital that is owned by or has a formal written affiliation with a college or university pursuant to 40 CFR Part 262, Subpart K (See 40 CFR 262.200).

ENVIRONMENTAL PROTECTION AGENCY (EPA) – The EPA, also called U.S. EPA, means the U.S. Environmental Protection Agency. Some State environmental authorities may be called the EPA also, as in “Illinois EPA.”

EPA IDENTIFICATION (ID) NUMBER – The number assigned by the EPA to each hazardous waste generator, hazardous waste transporter, and treatment, storage, or disposal facility; U.S. importer of hazardous waste; U.S. recognized trader arranging for import or export of hazardous waste, including those hazardous wastes managed under the alternate standards of 40 CFR Part 266 or the universal waste standards of 40 CFR Part 273; U.S. exporter or importer of spent lead-acid batteries for recycling; mixed waste (hazardous and radioactive) generator; recycler of hazardous waste; exempt boiler and/or industrial furnace burning or processing hazardous waste; large quantity handler of or

destination facility for universal wastes; disposer of hazardous waste with an underground injection permit; used oil transporter, used oil processor/re-refiner, off-specification used oil fuel burner, used oil fuel marketer; eligible academic entity managing laboratory hazardous waste under Subpart K; or site undergoing corrective action. Additionally, facilities that must notify using the Site Identification Form and Addendum to the Site Identification Form that they are managing hazardous secondary material will also be assigned an EPA Identification Number.

EPISODIC GENERATOR – An episodic generator is either a VSQG or an SQG who, as a result of a planned or unplanned episodic event, generates a quantity of hazardous waste in a calendar month sufficient to cause the facility to move into a more stringent generator category (i.e., VSQG to either an SQG or an LQG; or an SQG to an LQG). As part of the 2016 Hazardous Waste Generator Improvements Final Rule, this new provision allows a VSQG or an SQG to generate additional quantities of hazardous waste—temporarily exceeding its normal generator category limits—and still maintain its existing generator category, provided it complies with the specified conditions identified at 40 CFR 262.232 (a) and (b) for VSQGs and SQGs, respectively.

Although not inclusive, examples of planned episodic events include tank cleanouts, short-term site remediation, equipment maintenance during plant shutdowns, and periodic removal of excess chemical inventories. Unplanned episodic events, which EPA expects would be less frequent, include production process upsets, product recalls, accidental spills, or “acts of nature,” such as a tornado, hurricane, or flood.

EXCLUDED WASTES – Wastes excluded from the definition of solid or hazardous waste under 40 CFR 261.3 and 261.4. Click [here](#) for a partial listing of excluded wastes.

GM FORM – Waste Generation and Management Form.

HAZARDOUS WASTE – A hazardous waste as defined in 40 CFR 261.3.

HAZARDOUS SECONDARY MATERIAL (HSM) – A secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under 40 CFR Part 261. Facilities managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27) must complete the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material. You must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions (see also <https://www.epa.gov/hwggenerators/final-rule-2015-definition-solid-waste-dsw>).

HAZARDOUS WASTE GENERATOR – Any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR Part 261.

HAZARDOUS WASTE NUMBER OR CODE, EPA – The number (or code) assigned by the EPA to each hazardous waste listed in 40 CFR Part 261, Subpart D and to each characteristic identified in 40 CFR Part 261, Subpart C. The codes consist of one letter (D, F, P, U, or K) and three numbers. Click [here](#) for a list of EPA hazardous waste codes.

HAZARDOUS WASTE NUMBER OR CODE, STATE – The number (or code) assigned by the State to each hazardous waste listed in the State regulations. Obtain a list of the States waste codes from your State.

HAZARDOUS WASTE STORAGE – The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

HAZARDOUS WASTE TRANSFER FACILITY – Refer to “Transfer Facility” definition.

HAZARDOUS WASTE TRANSPORTER – Refer to “Transporter” definition.

HAZARDOUS WASTE 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 hazardous waste, or so as to recover energy or material resources from the hazardous waste, or so as to render such hazardous waste nonhazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or composition of hazardous waste so as to render it nonhazardous.

INCINERATION – Burning of certain types of solid, liquid, or gaseous materials; or a treatment technology involving destruction of waste by controlled burning at high temperatures (e.g., burning sludge to remove the water and reduce the remaining residues to a safe, non-burnable ash that can be disposed safely on land, in some waters, or in underground locations).

INDUSTRIAL FURNACE – Any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy: cement kilns; lime kilns; aggregate kilns; phosphate kilns; coke ovens; blast furnaces; smelting, melting, and refining furnaces; titanium dioxide chloride process oxidation reactors; methane reforming furnaces; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; halogen acid furnaces, as defined under industrial furnace in 40 CFR 260.10; and such other devices as the Administrator may add to this list.

INTERIM (PERMIT) STATUS – Period during which the owner/operator of an existing TSD facility is treated as having been issued a RCRA permit even though he/she has not yet received a final determination. An existing facility should have automatically qualified for interim status if the owner/operator filed both timely “notification” and the first part (Part A) of the RCRA permit application. Interim status continues until a final determination is made to issue or deny the permit. Owner/operator of new facilities cannot, by definition, qualify for interim status; rather, they need a RCRA permit prior to beginning construction of a hazardous waste management facility.

LARGE QUANTITY GENERATOR (LQG) OF HAZARDOUS WASTE – is a generator who generates any of the following amounts in a calendar month:

- (i) Generates, in any calendar month, (including quantities imported by importer site) 1,000 kilograms (kg) (2,200 pounds (lbs)) or more of non-acute RCRA hazardous waste; **or**
- (ii) Generates, in a calendar month, or accumulates at any time, more than 1 kg (2.2 lbs) of any RCRA acute hazardous waste listed in sections 261.31 or 261.33(e); **or**
- (iii) Generates, in any calendar month, or accumulates at any time, more than 100 kg (220 lbs) of residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any RCRA acute hazardous waste listed in sections 261.31 or 261.33(e).

LARGE QUANTITY HANDLER OF UNIVERSAL WASTE (LQH UW) – A universal waste handler (as defined in 40 CFR 273.9) who accumulates 5,000 kilograms (kg) or more total of universal wastes (batteries, pesticides, mercury-containing equipment, or lamps – calculated collectively) at any time. This designation is retained through the end of the calendar year in which the 5,000 kg limit is met or exceeded.

MANAGEMENT, OR HAZARDOUS WASTE MANAGEMENT – Systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, or disposal of hazardous waste (40 CFR 260.10).

MANIFEST, UNIFORM HAZARDOUS WASTE – The shipment document EPA Form 8700-22 and, if necessary, Form 8700-22A, originated and signed by a generator in accordance with the instructions included in the Appendix to 40 CFR Part 262. The “cradle-to-grave” paperwork must accompany a shipment of hazardous waste as it moves from the generator to the transporter and eventually to the hazardous waste management facility.

MIXED WASTE – Waste that contains both hazardous and source, special nuclear, or by-product material subject to the Atomic Energy Act (AEA), RCRA Section 5004(41), 42 U.S.C. 6903 (63 FR 17414; April 9, 1998).

MUNICIPALITY – A city, village, town, borough, county, parish, district, association, Indian tribe or authorized Indian tribal organization, designated and approved management agency under Section 208 of the Clean Water Act, or any other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.

OFF-SITE FACILITY – A hazardous waste treatment, storage, disposal, or recycling area located at a place away from the generating site.

OI FORM – Off-site Identification Form.

OFF-SPECIFICATION USED OIL BURNER – A site where used oil not meeting the specification requirements in 40 CFR 279.11 (off-specification used oil) is burned for energy recovery in devices identified in Section 279.61(a).

OFF-SPECIFICATION USED OIL FUEL – Used oil fuel that does not meet the specification provided under 40 CFR 279.11.

ON-SITE FACILITY – A hazardous waste treatment, storage, disposal, or recycling area located on the generating site.

ON-SPECIFICATION USED OIL FUEL – Used oil fuel that meets the specification provided under 40 CFR 279.11.

OPERATOR – The person responsible for the overall operation of a RCRA site. **Note:** This is the legal entity which controls the RCRA site operation rather than the plant or site manager. This is usually a company or business name, not an individual. See **Person**.

OWNER – The person who owns a RCRA site or part of a RCRA site. **Note:** This includes the owner(s) of the building(s) and/or land. This may be an individual, company, or business name. See **Person**.

PERSON – An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body, as defined in 40 CFR 260.10.

PROCESS SYSTEM – For purposes of the Hazardous Waste Report, a process system refers to one or more units used together to treat, recover, or dispose of a hazardous waste. The process system begins at the unit where the hazardous waste first enters and consists of all other treatment, recovery, or disposal units downstream from the point of entry. Note that storage is **not** considered a process system.

Classify each process system with a Management Method code that best identifies the **last substantive purpose/operation it performs**. For example, a process system to remove dissolved metals from wastewater prior to shipping the sludge off-site typically includes equalization, pH adjustment, chemical precipitation, flocculation, clarification/settling, and dewatering of the sludge removed from the bottom of the clarifier. The chemical precipitation process best identifies the last purpose of this treatment system – to remove metals from the wastewater. If this wastewater treatment system is RCRA-regulated, it would be reported as H070 (Chemical Treatment). If the sludge will be disposed at the reporting site in a landfill, the code will be H132 (Landfill) and will need to be reported on a separate GM Form because it is a residual from a treatment process. However, this process is exempt if the treated water flows to a POTW or a NPDES outfall with no RCRA-regulated storage or treatment units in the system, and should not be reported. [Click here](#) for a list of nationally-defined Management Method Codes.

PROCESS UNIT – For purposes of the Hazardous Waste Report, a process unit refers to a single type of treatment (e.g., tank, distillation column, surface impoundment) in which hazardous waste is treated, disposed, or recycled.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) – The Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA) (40 CFR 270.2). It is the Federal statute that regulates the generation, treatment, storage, disposal, recycling, and/or transportation of solid and hazardous waste.

RCRA INTERIM (PERMIT) STATUS – Refer to “Interim (Permit) Status” definition.

RCRA PERMIT – A complete RCRA permit is comprised of an operating permit for hazardous waste treatment, storage, and disposal, and a corrective action permit addressing releases from solid waste management unit (SWMUs). To apply for a permit, a site must file a two-part application (Part A and Part B). A facility is not considered to have a complete RCRA permit until both parts have been issued.

RCRA SUBTITLE C SITE (RCRA SITE OR SITE) – The physical plant or location at which one or more of the following regulated waste activities occurs: the generation, transportation, treatment, storage, or disposal of hazardous wastes; recycling of hazardous wastes; U.S. importer of hazardous waste; mixed waste (hazardous and radioactive) generator; exempt boiler and/or industrial furnace burning or processing hazardous waste; large quantity handler of or destination facility for universal wastes; disposing hazardous waste with an underground injection permit; the transportation (and temporary storage during transportation), processing/re-refining, burning, or marketing of used oil; eligible academic entity managing laboratory hazardous waste under Subpart K; facility managing hazardous

secondary material being reclaimed that must comply with certain requirements and conditions; or undergoing corrective action.

A site may consist of several treatment, storage, or disposal operational units. For entities that only transport regulated wastes, the term site refers to the headquarters of that entity's operations.

RECYCLING – Use, reuse, or reclamation of a material (40 CFR 261.1(c)(7)). “Reclamation” is the processing or regeneration of a material to recover a usable product (e.g., recovery of lead values from spent batteries, regeneration of spent solvents) (40 CFR 261.1(c)(4)). A material is “used or reused” if it is either: (1) employed as an ingredient (including use as an intermediate) in an industrial process to make a product (e.g., distillation bottoms from one process used as feedstock in another process) (40 CFR 261.1(c)(5)). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary material); or (2) a commercial product (e.g., spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

RESIDUAL – A hazardous waste derived from the treatment, disposal, or recycling of a previously existing hazardous waste (e.g., the sludge remaining after initial wastewater treatment).

SHORT-TERM GENERATOR – A facility that was not a hazardous waste generator until a one-time, non-recurring, temporary event occurred that is not related to normal production processes. In other words, short-term generators produce hazardous waste from a particular activity for a limited time and then cease conducting that activity and revert back to a non-hazardous waste generator category. Short-term generators are not considered episodic generators because episodic generators generate hazardous waste on a regular basis. Examples of short-term generators include: one-time highway bridge waste generation, underground storage tank removals, generation of off-spec or out-of-date chemicals at a site that normally **does not otherwise generate hazardous waste**, remediate or spill clean-up sites with no previous RCRA EPA Identification Number, and site or production process decommissions by a new operator.

SLUDGE – Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plan, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant (40 CFR 260.10).

SMALL QUANTITY GENERATOR (SQG) OF HAZARDOUS WASTE – is a generator if the site meets **all** of the following criteria:

- (i) Generates, in any calendar month, greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2200 lbs) of non-acute hazardous waste; **and**
- (ii) Generates, in any calendar month, less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in 261.31 or 261.33(e) of this chapter; **and**
- (iii) Generates, in any calendar month, less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 261.31 or 261.33(e) of this chapter.

SMALL QUANTITY ON-SITE BURNER EXEMPTION – The persons who burn small quantity of hazardous waste in an on-site boiler or industrial furnace, in accordance with 40 CFR 266.108, are conditionally exempt from regulation for that activity.

SMELTING, MELTING, AND REFINING FURNACE EXEMPTION – Under 40 CFR 266.100(c), owners or operators of smelting, melting, and refining furnaces that process hazardous wastes solely for metals recovery are conditionally exempt from regulation, except for 40 CFR 266.101 and 266.112, provided they comply with limited requirements set forth in Section 266.100(c). Similarly, 40 CFR 266.100(f) provides that owners or operators of smelting, melting, and refining furnaces that process hazardous wastes for the recovery of precious metals are conditionally exempt from regulation, except for 40 CFR 266.112, provided they comply with limited requirements specified in Section 266.100(f).

SOLID WASTE – Any garbage, refuse, or sludge, or other materials not excluded under 40 CFR 261.4(a). Exclusions include, for example, domestic sewage and any mixture of other wastes that pass through a sewer system to a publicly owned treatment works (POTWs); industrial wastewater discharges that are point source discharges subject to regulation under the Clean Water Act; irrigation return flows; nuclear materials defined by the Atomic Energy Act; and in situ mining materials. Click [here](#) for a partial list of excluded wastes. Wastewaters being collected, stored, or treated before discharge and sludges generated by wastewater treatment are not excluded. The EPA defines hazardous waste as a subset of solid waste.

SOURCE MATERIAL – As defined by the Atomic Energy Act of 1954: (1) Uranium, thorium, or any other material determined by the Nuclear Regulatory Commission pursuant to the provisions of Section 2091 of this title to be source material; or (2) ores containing one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

SPECIAL NUCLEAR MATERIAL – As defined by the Atomic Energy Act of 1954: (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Nuclear Regulatory Commission, pursuant to the provisions of Section 2071 of this title, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

SUBPART K – An alternative set of generator requirements for managing laboratory hazardous waste at eligible academic entities. Generators that are eligible academic entities with laboratories may elect to opt into 40 CFR 262 Subpart K and manage their laboratory hazardous waste under Subpart K in lieu of 40 CFR 262.14, 15, 16, and 17. In order for eligible academic entities (see definition) to opt into Subpart K or subsequently withdraw from Subpart K, they must use the Site ID Form to notify the appropriate State or EPA Regional Office. Refer to 40 CFR 262.203 and 262.204. **Note:** You must check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262 Subpart K and for any State-specific requirements.

SUPERFUND – The program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out the solid waste emergency response and long-term remedial activities of the EPA.

SURFACE IMPOUNDMENT – A natural topographic depression, man-made excavation, or diked area formed primarily from earthen materials (though it may be lined with man-made materials) that is designed to accumulate liquid wastes or wastes containing free liquids, and that is not an injection well (40 CFR 260.10).

TOLLING – Tolling arrangements describe a particular type of recycling contract between two companies. Specifically, the “tolling” company certifies that it has a contract with a manufacturer to produce a product, and that manufacturing process generates a residual material that can be recycled by the tolling company. If the tolling company certifies that the contract specifies that the tolling company owns and has responsibility for the recyclable material once it is generated, and the material is returned to the tolling company for reclamation, and subsequently recycled, the material is excluded from regulation (under 40 CFR 261.4(a)(23)), provided certain requirements are met.

TRANSFER FACILITY – Any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held for 10 days or less during the normal course of transportation (40 CFR 261.4(a)(23) and 40 CFR 263.12).

TRANSPORTER – A person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

UNDERGROUND INJECTION CONTROL – The subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. Underground injection wells are regulated under both the Safe Drinking Water Act and the Resource Conservation and Recovery Act (see 40 CFR Part 148).

UNIT – Refer to “Process Unit” definition.

UNITED STATES IMPORTER – Any person who imports hazardous waste from a site located in a foreign country into the U.S. This does not include hazardous waste shipped from U.S. territory or protectorate.

UNIVERSAL WASTE – Any of the following hazardous wastes that are managed under the universal waste requirements of 40 CFR Part 273: batteries, pesticides, mercury-containing equipment, and lamps. Some States may have State-specific universal wastes defined as well.

USED OIL – Any oil that has been refined from crude oil, or any synthetic oil, that has been used, and as a result of such use, is contaminated by physical or chemical impurities.

USED OIL FUEL MARKETER – Any person who conducts either of the following activities:

- (i) Directs a shipment of off-specification used oil from their site to an off-specification used oil burner; or
- (ii) First claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in 40 CFR 279.11.

USED OIL MANAGEMENT ACTIVITIES – For the purposes of the Site ID Form, includes used oil transportation; used oil processing and re-refining; burning off-specification used oil fuel; and used oil fuel marketing.

USED OIL PROCESSING – Chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation, and re-refining.

USED OIL PROCESSOR – A site that processes on-specification or off-specification used oil.

USED OIL RE-REFINER – A site that produces lubricating oils and greases, industrial fuel, asphalt extender, gasoline, and other products from on-specification or off-specification used oil.

USED OIL TRANSFER FACILITY – Any transportation-related facility, including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24 hours during the normal course of transportation and not longer than 35 days. Transfer facilities that store used oil for more than 35 days are subject to regulation under 40 CFR Part 279, Subpart F.

USED OIL TRANSPORTER – Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Used oil transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil-derived products or used oil fuel.

VERY SMALL QUANTITY GENERATOR (VSQG) OF HAZARDOUS WASTE – A generator who generates less than or equal to the following amounts in a calendar month:

- (i) 100 kilograms (kg) 220 pounds [lbs] of hazardous waste; **and**
- (ii) 1 kg (2.2 lbs) of acute hazardous wastes listed in sections 261.31, or 261.33(e); **and**
- (iii) 100 kg (220 lbs) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, or 261.33(e).

WASTE MINIMIZATION – The reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed. It includes any source reduction or recycling activity undertaken by a generator that results in: (1) the reduction of total volume or quantity of hazardous waste; (2) the reduction of toxicity of hazardous waste; or (3) both, as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.

WASTE OIL (BIENNIAL REPORTONLY) – Any oil that has been refined from crude oil, or any synthetic oil, that has been used, and as a result of such use, is contaminated by physical or chemical impurities and is managed as a hazardous waste.

WR FORM – Waste Received From Off-site Form.

SPECIAL INSTRUCTIONS

These instructions explain how to complete the Hazardous Waste Report for wastes and sites with unique regulatory or reporting requirements.

ASBESTOS, PCBs, WASTE OILS – In most cases, **do not** report asbestos, PCBs, and waste oils. However, you **must** report them if **any** of the following conditions exist:

- (1) If your State specifically requires that these wastes be reported;
- (2) If a listed RCRA hazardous waste (i.e., EPA hazardous waste code that begins with “F,” “K,” “P,” or “U”) is mixed with asbestos, PCBs, or waste oil, in which case the entire mixture is a hazardous waste; or
- (3) If the waste possesses one or more of the characteristics that result in assigning EPA hazardous waste code beginning with “D.” (This does not apply to used oil that is recycled as explained below.)

Do not report “used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic (criterion 3 above). Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.” (40 CFR 261.6(a)(4))

GROUNDWATER CONTAMINATED BY HAZARDOUS WASTE – Groundwater contaminated by RCRA hazardous waste **is not** considered a solid waste and is, therefore, not classified as a hazardous waste. However, because hazardous waste is “contained in” the groundwater, it must be treated “as if” it was a RCRA hazardous waste if it is removed for treatment, storage, or disposal.¹ When reporting groundwater contaminated by hazardous waste in the Hazardous Waste Report, observe the following conventions:

- (1) Enter “0” in the GM Form – Item 1.F (Quantity Generated). Explain in Item 4 - Comments that it is groundwater, not a hazardous waste that was generated on-site.
- (2) Report quantities managed on-site (GM Form, Item 2, On-site Process Systems 1 and 2); quantities shipped off-site for management (GM Form, Item 3); and quantities received from off-site and managed on-site (WR Form, Item E).

¹To determine if the contaminated media must be reported at all (generated OR treated): If the contamination is due to a characteristic waste, then it is the generator’s responsibility to determine if the contaminated groundwater is a hazardous waste. Once the characteristics are eliminated, the media is no longer considered to “contain” hazardous waste. If a facility has first removed groundwater and is claiming that the groundwater is contaminated with a listed hazardous waste or “contains” listed hazardous waste, EPA Regions or Authorized States should make a site-specific determination of whether the media is a RCRA Waste. Please see: “Management of Remediation Waste Under RCRA,” EPA530-F-98-026, October 14, 1998. RCRA Online Document No. 14291. Available online at: <http://yosemite.epa.gov/osw/rcre.nsf/0c994248c239947e85256d09007115f/d9e61a0505db4b6885256817006e32b8!OpenDocument>.

LAB PACKS – The following rules apply to the reporting of lab pack wastes in the Hazardous Waste Report:

- (1) You may aggregate lab pack wastes if they have the same Form Code. However, you must report them as separate wastes under the following conditions:
 - If they contain **RCRA acute hazardous wastes** (i.e., EPA hazardous waste codes F020, F021, F022, F023, F026, F027, and all “P” waste codes). Report separately from lab packs containing other RCRA hazardous wastes (all other EPA hazardous waste codes).
 - If they are managed differently from each other. For example, report lab packs shipped to landfills separately from those incinerated.
- (2) Enter a Form Code indicating lab packs (i.e., W001 or W004) on the GM Form, in Section 5 – Item E or on the WR Form, in Section 6- Item G. These Form Codes are to be used with any lab pack, whether the wastes are gaseous, liquid, solid, or sludge.
- (3) It is **not** necessary to report every EPA hazardous waste code included in a batch of lab packs. Record one, or a few predominant, EPA hazardous waste codes in Section 5 – Item B of the GM Form, or Item B of the WR Form. If there are many EPA hazardous waste codes associated with the batch of lab packs, enter “LABP” in the first four-character field in Section 5 – Item B of the GM Form, or Item B of the WR Form in Section 6; then enter “NA” in the remaining spaces for the EPA hazardous waste codes.
- (4) When reporting quantities for lab packs:
 - **Include** the weight of the containers if they are disposed (e.g., landfilled) or treated (e.g., incinerated) with the waste.
 - **Exclude** the weight of the containers if the waste is removed from the containers before treatment or disposal.

RCRA-RADIOACTIVE MIXED WASTES – By themselves, source material, special nuclear material, or by-product materials, as defined by the Atomic Energy Act of 1954 and amended by 42 U.S.C. 2011 et. Seq., are not classified as hazardous wastes under RCRA. However, if these materials are mixed with a RCRA hazardous waste, the material is controlled under RCRA regulation, as well as under the Atomic Energy Act (DOE, NRC, and EPA) regulations, and is to be reported in the Hazardous Waste Report.

SUBPART K LABORATORY WASTE CLEAN-OUT – A Subpart K laboratory clean-out conducted in accordance with 40 CFR 262.213(a), is defined as: once per 12 months per laboratory, a laboratory will have 30 days to conduct a clean-out and will not have to count the hazardous waste that consists of unused commercial chemical products (either listed or characteristic) generated during those 30 days towards the eligible academic entity’s generator status for the purposes of on-site accumulation. See 40 CFR 262.213(a)(1-4) for other Subpart K laboratory clean-out requirements.

The waste generated from this clean-out should be reported on the GM Form with a source code of “G17 – Subpart K Laboratory Waste Clean-out” with a generation amount of zero (0) (Item 1. F). The amount shipped off-site or managed on-site will be reported in Items 2 or 3 of the GM Form as appropriate.

Laboratory waste that is generated during routine operations (e.g., spent solvents or spent acids/bases) should be reported separately from Subpart K laboratory clean-out wastes. Routinely generated laboratory waste should be reported with source code(s) other than G17.

WASTES RECEIVED FROM VERY SMALL QUANTITY GENERATORS (VSQGs) – Waste management facilities sometimes receive hazardous waste from large numbers of VSQGs or other sites that do not have RCRA EPA Identification Numbers. To minimize the response burden for filling out the **WR Form** for these wastes, you may aggregate the wastes across generating sites, in accordance with these guidelines:

- (1) All the wastes must have the same EPA hazardous waste code (Item B), State hazardous waste code (Item C), Form code (Item G), and Management Method code (Item H).
- (2) Wastes received from different States must be reported separately. For the off-site handler EPA Identification Number (Item D), the entry should include the two-letter postal code of the originating State, followed by the letters “VSQG”.

For example, wastes received from several VSQGs in the State of Alaska (AK) that share a common EPA hazardous waste code, State hazardous waste code, Form code, and Management Method code could be aggregated in a single waste block of the WR Form (e.g., Waste 1). In Item D, the off-site handler EPA ID number is entered as “AKVSQG.” **Note:** This method of completing Item D can also be used for VSQG waste that is not aggregated.

WASTES RECEIVED FROM FOREIGN COUNTRIES – Reporting on the GM Form – If your site was the generator of record and was the U.S. Importer for hazardous waste received from a site located in a foreign country (other than U.S. territory or protectorate), complete a GM Form. Enter the appropriate code in Item 1.D (Source Code) from the list of codes G63 through G75 (Hazardous waste received from [name of foreign country]). Include the Import Notification and other foreign generator information in the Comments. Also, mark “Yes” on the Site ID Form, Item 10.A.3 – United States Importer of Hazardous Waste. Report on the OI Form the name and address of all foreign generators if this form is required by your State. If you are a TSDF as well as an importer of record, refer to the following instructions about an alternative to reporting on GM Forms.

Report on the WR Form – If your site received hazardous waste directly from a generator at a site located in a foreign country (other than a U.S. territory or protectorate), complete a WR Form for the waste treated, recovered, or disposed at your site. Only the first TSD site receiving foreign hazardous waste should report the waste in WR. If this waste is then shipped to another domestic site it is not counted as imported waste on the WR by the second site. If the foreign site has an EPA assigned Identification (ID) Number listed in the Code Description section or in the lookup table in RCRAInfo, fill out the WR Form as you would for a domestic site, using this number on the list or the list in the lookup table in the RCRAInfo. If the site does not have an EPA assigned ID number on the list or in the lookup table, report the code “FC” for foreign country followed by the name of the country in the space for the EPA ID Number or add the new handler or update the old one (e.g., when there is a name change) in the lookup table in RCRAInfo. If your State requires the OI Form, the name and address of the foreign handler does not need to be in the comments section of the WR Form.

Federal requirement for imported hazardous wastes is under 40 CFR §§ 264.75 and 265.75 for TSDFs and/or the 40 CFR § 262.41 for importers complying with generator requirements (or equivalent authorized state requirements

As the owner or operator of the TSDF receiving hazardous waste import shipments, you must report such hazardous waste import shipments using the WR Form, as appropriate. If your facility was acting as the importer of record, you assumed generator requirements for those import shipments and must also report the import shipments as generated hazardous wastes from a foreign source using the GM Form.

An EPA-acceptable alternative for you to meet your generator biennial reporting requirement for those import shipments would be for you to add a statement to the comment field of your WR form for those import shipments noting that your TSDF was the importer of record for the listed import shipment(s). Please check with your authorized State Agency on how best to meet your generator biennial reporting requirements.

If your facility was not acting as the importer, EPA strongly encourages the importer to comply with the biennial reporting requirements in 40 CFR § 262.41 (or equivalent authorized state requirements). All parties possibly acting as the importer could be held jointly and severally liable for compliance with the generator requirements of Part 262².

WASTES SHIPPED TO FOREIGN COUNTRIES— Reporting on the GM Form, Item 3.B –Facilities that export hazardous waste must file a separate Annual Report under 40 CFR 262.83(g). This Annual Report will be in addition to the Hazardous Waste Report, if your State requires you to submit a Hazardous Waste Report with hazardous waste exported directly to a site located in a foreign country. If your State requires you to report exported hazardous waste, facilities that export hazardous waste should list in GM Item 3.B a Foreign Site Identification Number listed in the Code Description section or in the lookup table in RCRAInfo. If a site located in a foreign country to which hazardous waste is shipped is not on the list, enter “FC” followed by the name of the country as the EPA Identification Number or add the new handler or update the old one (e.g., when there is a name change) in the lookup table in RCRAInfo.

² Memo from John Skinner, Director of EPA’s Office of Solid Waste to Harry Seraydarian, Director, Toxics and Waste Management Division, EPA Region IX, June 25, 1985, available online at [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E27643CD81ABBDCA8525670F006BD187/\\$file/11085.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/E27643CD81ABBDCA8525670F006BD187/$file/11085.pdf).

EPA HAZARDOUS WASTE CODES

A list of all the hazardous waste codes is shown below. See the regulations for details.

CHARACTERISTICS OF HAZARDOUS WASTE (SEE 40 CFR 261.24) – DXXX

HAZARDOUS WASTE FROM NON-SPECIFIC SOURCES (SEE 40 CFR 261.31) – FXXX

HAZARDOUS WASTE FROM SPECIFIC SOURCES (SEE 40 CFR 261.32) – KXXX

DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF – ACUTE HAZARDOUS WASTE (SEE 40 CFR 261.33) – PXXX

DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF – TOXIC WASTES (SEE 40 CFR 261.33) – UXXX

D001	F001	K001	K047	K123	P001	P050	P106	U001	U048	U095	U143	U189	U247
D002	F002	K002	K048	K124	P002	P051	P108	U002	U049	U096	U144	U190	U248
D003	F003	K003	K049	K125	P003	P054	P109	U003	U050	U097	U145	U191	U249
D004	F004	K004	K050	K126	P004	P056	P110	U004	U051	U098	U146	U192	U271
D005	F005	K005	K051	K131	P005	P057	P111	U005	U052	U099	U147	U193	U278
D006	F006	K006	K052	K132	P006	P058	P112	U006	U053	U101	U148	U194	U279
D007	F007	K007	K060	K136	P007	P059	P113	U007	U055	U102	U149	U196	U280
D008	F008	K008	K061	K141	P008	P060	P114	U008	U056	U103	U150	U197	U328
D009	F009	K009	K062	K142	P009	P062	P115	U009	U057	U105	U151	U200	U353
D010	F010	K010	K069	K143	P010	P063	P116	U010	U058	U106	U152	U201	U359
D011	F011	K011	K071	K144	P011	P064	P118	U011	U059	U107	U153	U203	U364
D012	F012	K013	K073	K145	P012	P065	P119	U012	U060	U108	U154	U204	U367
D013	F019	K014	K083	K147	P013	P066	P120	U014	U061	U109	U155	U205	U372
D014	F020	K015	K084	K148	P014	P067	P121	U015	U062	U110	U156	U206	U373
D015	F021	K016	K085	K149	P015	P068	P122	U016	U063	U111	U157	U207	U387
D016	F022	K017	K086	K150	P016	P069	P123	U017	U064	U112	U158	U208	U389
D017	F023	K018	K087	K151	P017	P070	P127	U018	U066	U113	U159	U209	U394
D018	F024	K019	K088	K156	P018	P071	P128	U019	U067	U114	U160	U210	U395
D019	F025	K020	K093	K157	P020	P072	P185	U020	U068	U115	U161	U211	U404
D020	F026	K021	K094	K158	P021	P073	P188	U021	U069	U116	U162	U213	U409
D021	F027	K022	K095	K159	P022	P074	P189	U022	U070	U117	U163	U214	U410
D022	F028	K023	K096	K161	P023	P075	P190	U023	U071	U118	U164	U215	U411
D023	F032	K024	K097	K169	P024	P076	P191	U024	U072	U119	U165	U216	
D024	F034	K025	K098	K170	P026	P077	P192	U025	U073	U120	U166	U217	
D025	F035	K026	K099	K171	P027	P078	P194	U026	U074	U121	U167	U218	
D026	F037	K027	K100	K172	P028	P081	P196	U027	U075	U122	U168	U219	
D027	F038	K028	K100	K174	P029	P082	P197	U028	U076	U123	U169	U220	
D028	F039	K029	K101	K175	P030	P084	P198	U029	U077	U124	U170	U221	
D029		K030	K102	K176	P031	P085	P199	U030	U078	U125	U171	U222	
D030		K031	K103	K177	P033	P087	P201	U031	U079	U126	U172	U223	
D031		K032	K104	K178	P034	P088	P202	U032	U080	U127	U173	U225	
D032		K033	K105	K181	P036	P089	P203	U033	U081	U128	U174	U226	
D033		K034	K106		P037	P092	P204	U034	U082	U129	U176	U227	
D034		K035	K107		P038	P093	P205	U035	U083	U130	U177	U228	
D035		K036	K108		P039	P094		U036	U084	U131	U178	U234	
D036		K037	K109		P040	P095		U037	U085	U132	U179	U235	
D037		K038	K110		P041	P096		U038	U086	U133	U180	U236	
D038		K039	K111		P042	P097		U039	U087	U134	U181	U237	
D039		K040	K112		P043	P098		U041	U088	U135	U182	U238	
D040		K041	K113		P044	P099		U042	U089	U136	U183	U239	
D041		K042	K114		P045	P101		U043	U090	U137	U184	U240	
D042		K043	K115		P046	P102		U044	U091	U138	U185	U243	
D043		K044	K116		P047	P103		U045	U092	U140	U186	U244	
		K045	K117		P048	P104		U046	U093	U141	U187	U246	
		K046	K118		P049	P105		U047	U094	U142	U188		

HAZARDOUS SECONDARY MATERIAL (HSM) FACILITY CODES

Facility codes describe the specific regulation a facility uses to manage its hazardous secondary material (HSM) and the type of activity the facility performs under the regulation (e.g., generator, reclaimer). Review the groups and pick the appropriate code. If more than one facility code applies to you, enter each code on a separate row under Item 2 of the Addendum to the Site Identification Form.

Under Generator Exclusion ((40 CFR 261.4(a)(23))	
Code	Facility Code Description
01	HSM Generator reclaiming HSM “on-site”: This code applies if you generate and reclaim hazardous secondary material at your generating facility.
02	HSM Generator transferring HSM to reclaimer within the “same company”: This code applies if you generate hazardous secondary material and send the material for reclamation to a different facility that is either controlled by you or controlled by the same person that controls your generating facility.
03	Reclaimer receiving HSM from HSM generator within the “same company”: This code applies if you receive and reclaim hazardous secondary material from a different facility that either controls you or is controlled by the same person that controls you.
04	Tolling Contractor reclaiming HSM pursuant to a tolling contract: This code applies if you are a tolling contractor that reclaims hazardous secondary material pursuant to a written contract with a toll manufacturer.
05	Toll Manufacturer managing HSM pursuant to a tolling contract: This code applies if you generate and send hazardous secondary material for reclamation to a tolling contractor pursuant to a written contract.
Verified Recycler Exclusion (40 CFR 261.4(a)(24))	
Code	Facility Code Description
06	HSM Generator transferring HSM off-site to a domestic reclamation facility: This code applies if you generate and send hazardous secondary material for reclamation to an off-site domestic reclamation facility.
07	Permitted Reclaimer receiving HSM from off-site: This code applies if you have a RCRA Part B permit, or operate under interim status standards, and reclaim hazardous secondary material received from an off-site hazardous secondary material generator or other facility. (If you do not have a RCRA Part B permit and are not operating under interim status standards and instead, have obtained a variance to receive hazardous secondary material under this exclusion, use code 17 below.)
08	Permitted Intermediate facility: This code applies if you have a RCRA Part B permit, or operate under interim status standards, and receive hazardous secondary material from an off-site hazardous secondary material generator or another domestic facility and you store it for more than ten days. This code does not apply if you generate or reclaim the hazardous secondary material. (If you do not have a RCRA Part B permit and are not operating under interim status standards and instead, have obtained a variance to receive hazardous secondary material under this exclusion, use code 18 below.)
Imports (40 CFR 261.4(a)(24)	
Code	Facility Code Description
09	[Reserved]
10	HSM Generator importing HSM from a foreign country to send to recycling: This code applies if you import hazardous secondary material from a foreign country and send the material for reclamation to a permitted or verified recycling facility.
11	HSM Generator AND Permitted Reclaimer of imported HSM: This code applies if you import hazardous secondary material from a foreign country and reclaim the material at your facility under a RCRA Part B permit or under interim status standards. (If you do not have a RCRA permit and are not operating under interim status standards and, instead, have obtained a variance to receive hazardous secondary material under this exclusion, use code 18 below.)

Non-waste Determinations and Solid Waste Variances (40 CFR 260.30)	
Code	Facility Code Description
14	Variance for Materials that are Accumulated Speculatively: This code applies if you operate under an approved variance from EPA or your State for materials that are accumulated speculatively without sufficient amounts being recycled (see 40 CFR 260.31(a)).
15	Variance for Materials that are Reclaimed and then Reused within the Original Production Process: This code applies if you operate under an approved variance from EPA or your State for materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated (see 40 CFR 260.31(b)).
16	Variance for Materials that are Partially-Reclaimed: This code applies if you operate under an approved variance from EPA or your State for materials that have been partially-reclaimed but must be reclaimed further before recovery is completed if the partial reclamation has produced a commodity-like material (see 40 CFR 260.31(c)).
17	Variance for HSM transferred for reclamation and managed at a verified reclamation facility: This code applies if you operate under an approved variance from EPA or your State for hazardous secondary materials that are transferred to you for reclamation under 40 CFR 261.4(a)(24) (see 40 CFR 260.31(d)). (If you have not obtained a variance to receive hazardous secondary material under this exclusion and, instead, have a RCRA Part B permit or operate under interim status standards, use code 07 above.)
18	Variance for HSM transferred and managed at a verified intermediate facility: This code applies if you operate under an approved variance from EPA or your State for hazardous secondary materials that are transferred to you for storage greater than 10 days under 40 CFR 261.4(a)(24) (see 40 CFR 260.31(d)). (If you have not obtained a variance to receive hazardous secondary material under this exclusion and, instead, have a RCRA Part B permit or operate under interim status standards as an intermediate facility, use code 08 above.)
19	Variance for HSM imported AND managed at a verified reclamation facility: This code applies if you operate under an approved variance from EPA or your State for hazardous secondary materials that are imported to you for reclamation at your site under 40 CFR 261.4(a)(24) (see 40 CFR 260.31(d)). (If you have not obtained a variance to receive hazardous secondary material under this exclusion and, instead, have a RCRA Part B permit or operate under interim status standards, use code 07 above.)
20	Non-waste determination for HSM reclaimed in a continuous industrial process: This code applies if you operate under an approved non-waste determination from EPA or your State for hazardous secondary material which is reclaimed in a continuous industrial process (see 40 CFR 260.34(b)).
21	Non-waste determination for HSM that are indistinguishable from a product or intermediate: This code applies if you operate under an approved non-waste determination from EPA or your State for hazardous secondary materials which is indistinguishable in all relevant aspects from a product or intermediate (see 40 CFR 260.34(c)).

HAZARDOUS SECONDARY MATERIAL (HSM) LAND-BASED UNIT CODES

Determine the 2-digit code that best describes the land-based unit you use or will use to manage the hazardous secondary material.

Code	Land-based Unit Code Description
NA	Do not use land-based units to manage hazardous secondary material.
SI	Use surface impoundment(s) to manage hazardous secondary material. A surface impoundment is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid hazardous secondary materials or materials containing free liquids and which is not an injection well.
PL	Use pile(s) to manage hazardous secondary material. Pile means any non-containerized accumulation of solid, non-flowing hazardous secondary material that is used for storage and is not a containment building.
OT	Use other land-based unit(s) to manage hazardous secondary material.

SOURCE CODES

Source codes describe the type of process or activity (i.e., source) from which a hazardous waste was generated. Review the groups and pick the appropriate code.

Wastes From On-going Production and Service Processes (waste from general day to day manufacturing, production, or maintenance activities)	
Code	Source Code Description
G01	Dip, flush or spray rinsing (using solvents to clean or prepare parts or assemblies for further processing – i.e. painting or assembly)
G02	Stripping and acid or caustic cleaning (using caustics to remove coatings or layers from parts or assemblies)
G03	Plating and phosphating (electro- or non-electroplating or phosphating)
G04	Etching (using caustics or other methods to remove layers or partial layers)
G05	Metal forming and treatment (pickling, heat treating, punching, bending, annealing, grinding, hardening, etc.)
G06	Painting and coating (manufacturing, building, or maintenance)
G07	Product and by-product processing (direct flow of wastes from chemical manufacturing or processing, etc.)
G08	Removal of spent process liquids or catalysts (bulk removal of wastes from chemical manufacturing or processing, etc.)
G09	Other production or service-related processes from which the waste is a direct outflow or result (specify in comments)
Wastes From Other Intermittent Events or Processes	
Code	Source Code Description
G11	Discarding off-specification, out-of-date, and/or unused chemicals or products
G12	Lagoon or sediment dragout and leachate collection (large scale operations in open pits, ponds, or lagoons)
G13	Cleaning out process equipment (periodic sludge or residual removal from enclosed processes including internal scrubbing or cleaning)
G14	Removal of tank sludge, sediments, or slag (periodic sludge or residual removal from storage tanks including internal scrubbing or cleaning)
G15	Process equipment change-out or discontinuation of equipment use (final materials and residuals removal including cleaning)
G16	Oil changes and filter or battery replacement (automotive, machinery, etc.)
G17	Subpart K laboratory waste clean-out (facility must have opted into the Subpart K rule to use this source code)
G19	Other one-time or intermittent processes (specify in comments)
Residuals From Pollution Control and Waste Management Processes	
Code	Source Code Description
G21	Air pollution control devices (e.g., baghouse dust ash, etc. from stack scrubbers or precipitators; vapor collection, etc.)
G22	Laboratory analytical wastes (e.g., used chemicals from laboratory operations)
G23	Wastewater treatment (e.g., sludge, filter cake, etc., including wastes from treatment before discharge by NPDES or POTW or by UIC disposal)
G24	Solvent or product distillation as part of a production process (including totally enclosed treatment systems). Does not include batch treatment in a separate process.
G25	Treatment, disposal, or recycling of hazardous wastes – report a management method code, e.g., indicated in Item H of WR Form for the management method (enter the related management method code, a H code, but not H141) that produced the residuals.
G26	Leachate collection (from landfill operations or other land units)
G27	Treatment or recovery of universal waste

Wastes From Spills and Accidental Releases	
Code	Source Code Description
G31	Accidental contamination of products, materials, or containers (other than G11)
G32	Cleanup of spill residues (infrequent, not routine)
G33	Leak collection and floor sweeping (on-going, routine)
G39	Other cleanup of current contamination (specify in comments)
Wastes From Remediation of Past Contamination	
Code	Source Code Description
G41	Closure of hazardous waste management unit under RCRA
G42	Corrective action at a solid waste management unit under RCRA
G43	Remedial action or emergency response under Superfund
G44	Cleanup under State or voluntary program
G45	Cleanup of underground storage tank
G49	Other remediation (specify in comments)
Wastes Received by an LQG from VQGSs Under the Control of the Same Person	
Code	Source Code Description
G51	Hazardous wastes received by an LQG from VSQGs under the control of the same person
Wastes Not Physically Generated On-site	
Code	Source Code Description
G61	Received from off-site for storage/bulking and transfer off-site for treatment or disposal (to match H141 received waste quantities from Form WR's). GENERATION QUANTITY SHOULD BE ZERO to avoid double counting.
For codes G63-G75	Hazardous waste received from a site located in a foreign country (other than a U.S. territory or protectorate). This site was the generator of record and is the U.S. Importer. Enter the appropriate code from the list below.
G63	Hazardous waste received from Antarctica
G64	Hazardous waste received from Aruba
G65	Hazardous waste received from Bahamas
G66	Hazardous waste received from Belgium
G67	Hazardous waste received from Brazil
G68	Hazardous waste received from Canada
G69	Hazardous waste received from Holland
G70	Hazardous waste received from Malaysia
G71	Hazardous waste received from Mexico
G72	Hazardous waste received from New Zealand
G73	Hazardous waste received from Taiwan
G74	Hazardous waste received from Venezuela
G75	Hazardous waste received from other foreign country – see Comments for country name

FORM CODES

Form codes describe the general physical and chemical characteristics of a hazardous waste. Review the groups and pick the appropriate code.

Mixed Media/Debris/Devices – Waste that is a mixture of organic and inorganic wastes, liquid and solid wastes, or devices that are not easily categorized	
Code	Form Code Description
W001	Lab packs from any source not containing acute hazardous waste
W002	Contaminated debris (see definition at 40 CFR 268.2(g) and requirements at 40 CFR 268.45); for example, certain paper, clothing, rags, wood, empty fiber or plastic containers, glass, piping, or other solids
W004	Lab packs from any source containing acute hazardous waste
W005	Waste pharmaceuticals managed as hazardous waste
W301	Contaminated soil (usually from spill cleanup, demolition, or remediation); see also W512
W309	Batteries, battery parts, cores, casings (lead-acid or other types)
W310	Filters, solid adsorbents, ion exchange resins and spent carbon (usually from production, intermittent processes, or remediation)
W320	Electrical devices (lamps, fluorescent lamps, or thermostats usually containing mercury; CRTs containing lead; etc.)
W512	Sediment or lagoon dragout, drilling or other muds (wet or muddy soils); see also W301
W801	Compressed gases of any type
Inorganic Liquids – Waste that is primarily inorganic and highly fluid (e.g., aqueous), with low suspended inorganic solids and low organic content	
Code	Form Code Description
W101	Very dilute aqueous waste containing more than 99% water (land disposal restriction defined wastewater that is not exempt under NPDES or POTW discharge)
W103	Spent concentrated acid (5% or more)
W105	Acidic aqueous wastes less than 5% acid (diluted but pH <2)
W107	Aqueous waste containing cyanides (generally caustic)
W110	Caustic aqueous waste without cyanides (pH >12.5)
W113	Other aqueous waste or wastewaters (fluid but not sludge)
W117	Waste liquid mercury (metallic)
W119	Other inorganic liquid (specify in comments)
Organic Liquids – Waste that is primarily organic and is highly fluid, with low inorganic solids contents and low-to-moderate water content	
Code	Form Code Description
W200	Still bottoms in liquid form (fluid but not sludge)
W202	Concentrated halogenated (e.g., chlorinated) solvent
W203	Concentrated non-halogenated (e.g., non-chlorinated) solvent
W204	Concentrated halogenated/non-halogenated solvent mixture
W205	Oil-water emulsion or mixture (fluid but not sludge)
W206	Waste oil managed as hazardous waste
W209	Paint, ink, lacquer, or varnish (fluid – not dried out or sludge)
W210	Reactive or polymerizable organic liquids and adhesives (fluid but not sludge)
W211	Paint thinner or petroleum distillates
W219	Other organic liquid (specify in comments)

Inorganic Solids – Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable	
Code	Form Code Description
W303	Ash (from any type of burning of hazardous waste)
W304	Slags, drosses, and other solid thermal residues
W307	Metal scale, filings and scrap (including metal drums)
W312	Cyanide or metal cyanide bearing solids, salts or chemicals
W316	Metal salts or chemicals not containing cyanides
W319	Other inorganic solids (specify in comments)
Organic Solids – Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable	
Code	Form Code Description
W401	Pesticide solids (used or discarded – not contaminated soils – W301)
W403	Solid resins, plastics or polymerized organics
W405	Explosives or reactive organic solids
W406	Dried paint (paint chips, filters, air filters, other)
W409	Other organic solids (specify in comments)
Inorganic Sludges – Waste that is primarily inorganic, with moderate-to-high water content and low organic content; mostly pumpable	
Code	Form Code Description
W501	Lime and/or metal hydroxide sludges and solids with no cyanides (not contaminated muds – W512)
W503	Gypsum sludges from wastewater treatment or air pollution control
W504	Other sludges from wastewater treatment or air pollution control
W505	Metal bearing sludges (including plating sludge) not containing cyanides
W506	Cyanide-bearing sludges (not contaminated soils – W512)
W519	Other inorganic sludges (not contaminated muds – W512; specify in comments)
Organic Sludges – Waste that is primarily organic with low-to-moderate inorganic solids content and water content; pumpable	
Code	Form Code Description
W603	Oily sludge (not contaminated muds – W512)
W604	Paint or ink sludges, still bottoms in sludge form (not contaminated muds – W512)
W606	Resins, tars, polymer or tarry sludge (not contaminated muds – W512)
W609	Other organic sludge (specify in comments)

MANAGEMENT METHOD CODES

Management method codes describe the type of hazardous waste management system used to treat, recover, or dispose a hazardous waste. Select the final substantive method used. Review the groups and pick the appropriate code.

Reclamation and Recovery	
Code	Management Method Code Description
H010	Metals recovery including retorting, smelting, chemical, etc.
H020	Solvents recovery (distillation, extraction, etc.)
H039	Other recovery or reclamation for reuse including acid regeneration, organics recovery, etc. (specify in comments)
H050	Energy recovery at this site – used as fuel (includes on-site fuel blending before energy recovery; report only this code)
H061	Fuel blending prior to energy recovery at another site (waste generated on-site or received from off-site)
Destruction or Treatment Prior to Disposal at Another Site	
Code	Management Method Code Description
H040	Incineration – thermal destruction other than use as a fuel (includes any preparation prior to burning)
H070	Chemical treatment (reduction/destruction/oxidation/precipitation); do not include immediate treatment in an exempt wastewater treatment unit with discharge to a NPDES-POTW (unless required by State)
H081	Biological treatment; do not include immediate treatment in an exempted wastewater treatment unit with discharge to a NPDES-POTW (unless required by State)
H100	Physical treatment only (adsorption/absorption/separation/stripping/dewatering); do not include immediate treatment in an exempted wastewater treatment unit with discharge to a NPDES-POTW (unless required by State)
H110	Stabilization prior to land disposal at another site (encapsulation/stabilization/fixation)
H120	Combination of chemical, biological, and/or physical treatment; do not include immediate treatment in an exempted wastewater treatment unit with discharge to a NPDES-POTW (unless required by State)
H121	Neutralization only (no other treatment)
H122	Evaporation (as the major component of treatment; not reportable as H070, H081, H100 or H120)
H129	Other treatment that does not include onsite disposal (specify in comments)
Disposal	
Code	Management Method Code Description
H130	Surface Impoundment that will be closed as a landfill (with prior treatment and/or stabilization meeting LDR treatment standard)
H131	Land treatment or application (with any prior treatment and/or stabilization)
H132	Landfill (with prior treatment and/or stabilization)
H134	Deepwell or underground injection (with or without treatment; this waste was counted as hazardous waste)
H135	Discharge to sewer/POTW or NPDES with prior management (e.g., storage or transported prior to discharge to POTW or by NPDES)
Transfer Off-site	
Code	Management Method Code Description
H141	The site receiving this waste stored/bulked and transferred the waste with no reclamation, recovery, destruction, treatment or disposal at that site. [Do not use this code in Item 1.D (source code G25) or Item 2 (On-site Management) of Form GM]. For Form WR, linked to source code G61 on Form GM.

WASTE MINIMIZATION CODES

The following codes provide a description of existing or new waste minimization efforts undertaken to reduce the volume and/or toxicity of hazardous waste generated at the facility.

You may use the Comments section to provide any additional information (including toxicity and quantity reductions to the extent that data is available) that will help the EPA and the States understand your efforts to prevent pollution, minimize waste, or recycle in regards to this waste stream. Additionally, you may explain in the Comments section why your efforts were either successful or unsuccessful or why you did not implement waste minimization efforts for this reporting year.

The facility initiated waste minimization efforts prior to the reporting year and continued these efforts during the reporting year for this hazardous waste		
Code	Waste Minimization Code Description	Examples
A	Continued initiatives to reduce quantity and/or toxicity of this waste	<ul style="list-style-type: none"> Improved production/synthesis processes, e.g., increased efficiency in product usage/product formulation, used less toxic or non-hazardous ingredients, modified product composition, or implemented technology conversion. Modified equipment, layout, and/or piping, e.g., longer auto bath analyzers, wastewater treatment system upgraded. Undertook inventory control/waste management processes or safety/good operating practices, e.g., materials shelf-life control, clearinghouse for materials exchange, better labeling procedures, improved maintenance scheduling/record keeping/procedures, control production schedule to minimize equipment and feedstock changeovers, bulk systems that replace drums, improved storage, spill/leak/accident prevention, cleaning/degreasing, etc.
B	Continued initiatives to recycle the waste either on-site or off-site	<ul style="list-style-type: none"> The waste was used, reused, or reclaimed as a result of a change in the product formulation, product's chemical ingredients, or equipment; materials management process with a goal of sustainable use of materials, etc.
The facility initiated waste minimization efforts during the reporting year for this hazardous waste		
C	Implemented new initiatives to reduce quantity and/or toxicity of this waste	See examples above for Code A.
D	Implemented new initiatives to recycle the waste either on-site or off-site	See examples above for Code B.

The facility examined or attempted waste minimization efforts for this hazardous waste, but determined it was impracticable to implement these efforts; or the facility did not attempt waste minimization efforts for this waste		
Code	Waste Minimization Code Description	Examples
N	Waste minimization efforts found to be economically or technically impracticable	Economic constraints or not economically feasible; technical limitations of manufacturing operations, problems preventing or halting efforts (e.g., concern of declined product quality); not appearing to be feasible due to regulatory issues (e.g., permitting requirements or burdens); lack of available technology, etc.
X	No waste minimization efforts were implemented for this waste	The waste was received from off-site and was not generated at this location; the waste is infrequently generated.

PROCESS CODES

Determine the process code that best describes each process to be used at the facility. Provide the unit of measure associated with the amount of waste reported for that process. Use only units of measures appropriate for that process code. Click [here](#) to see a list of the Unit of Measure Codes.

Process Code	Process	Gallons	Gallons Per Hour	Gallons Per Day	Liters	Liters Per Hour	Liters Per Day	Short Tons Per Hour	Short Tons Per Day	Metric Tons Per Hour	Metric Tons Per Day	Pounds Per Hour	Kilograms Per Hour	Million BTUs Per Hour	Cubic Yards	Cubic Meters	Acres	Acre-feet	Hectares	Hectare-meter	BTUs Per Hour
Disposal																					
D79	Underground Injection Well Disposal	X		X	X		X														
D80	Landfill																X	X	X	X	X
D81	Land Treatment																	X		X	
D82	Ocean Disposal				X			X													
D83	Surface Impoundment Disposal	X			X												X	X			
D99	Other Disposal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Storage																					
S01	Container	X			X												X	X			
S02	Tank Storage	X			X													X	X		
S03	Waste Pile																	X	X		
S04	Surface Impoundment	X			X												X	X			
S05	Drip Pad	X			X												X	X		X	
S06	Containment Building Storage																	X	X		
S99	Other Storage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Treatment																					
T01	Tank Treatment				X			X													
T02	Surface Impoundment			X			X														
T03	Incinerator		X	X		X		X	X	X	X	X	X	X	X	X				X	
T04	Other Treatment		X	X		X	X	X	X			X	X	X	X						X
T80	Boiler	X	X		X	X															X
T81	Cement Kiln			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T82	Lime Kiln			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T83	Aggregate Kiln			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T84	Phosphate Kiln			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T85	Coke Oven			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T86	Blast Furnace			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T87	Smelting, Melting, or Refining Furnace			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T88	Titanium Dioxide Chloride Oxidation Reactor			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T89	Methane Reforming Furnace			X	X	X	X	X	X	X	X	X	X	X	X	X					X
T90	Pulping Liquor Recovery Furnace			X	X	X	X	X	X	X	X	X	X	X	X	X					X

Process Code	Process	Gallons	Gallons Per Hour	Gallons Per Day	Liters	Liters Per Hour	Liters Per Day	Short Tons Per Hour	Short Tons Per Day	Metric Tons Per Hour	Metric Tons Per Day	Pounds Per Hour	Kilograms Per Hour	Million BTUs Per Hour	Cubic Yards	Cubic Meters	Acres	Acre-feet	Hectares	Hectare-meter	BTUs Per Hour
T91	Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid		X	X	X	X	X	X	X	X	X	X	X	X						X	
T92	Halogen Acid Furnaces			X	X	X	X	X	X	X	X	X	X	X						X	
T93	Other Industrial Furnaces Listed in 40 CFR 260.10		X	X	X	X	X	X	X	X	X	X	X	X						X	
T94	Containment Building Treatment	X	X		X	X	X	X	X	X	X	X	X	X	X	X				X	
Miscellaneous (Subpart X)																					
X01	Open Burning/Open Detonation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
X02	Mechanical Processing		X	X		X		X	X	X	X	X	X	X							
X03	Thermal Unit			X			X	X	X	X	X	X	X	X						X	
X04	Geologic Repository	X		X											X	X	X	X	X	X	
X99	Other Subpart X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

UNIT OF MEASURE CODES

The following codes provide a description of the unit of measure reported with the process code and waste code information in the Part A Permit Application. These units of measure are NOT used for the Hazardous Waste Report.

Code	Unit of Measure Description
A	Acre-feet
B	Acres
C	Cubic Meters
D	Short Tons Per Hour
E	Gallons Per Hour
F	Hectare-meter
G	Gallons
H	Liters Per Hour
I	BTUs Per Hour
J	Pounds Per Hour
L	Liters
N	Short Tons Per Day
Q	Hectares
R	Kilograms Per Hour
S	Metric Tons Per Day
U	Gallons Per Day
V	Liters Per Day
W	Metric Tons Per Hour
X	Million BTUs Per Hour
Y	Cubic Yards

PERMIT TYPE CODES

The following codes provide a description of other environmental permits that a facility may have or be obtaining.

Type	Permit Type Code Description
N	NPDES (National Pollutant Discharge Elimination System) Clean Water Act
P	PSD (Prevention of Significant Deterioration) Clean Air Act
R	RCRA (Resource Conservation and Recovery Act)
U	UIC (Underground Injection Control) Safe Drinking Water Act
F	EPA 404 (Dredge or Fill Permits under Section 404 of the Clean Water Act)
E	Other relevant environmental permits. List any other relevant Federal (e.g., permits under the Ocean Dumping Act), State (e.g., State permits for new air emission sources in nonattainment areas under Part D of the Clean Air Act or State permits under Section 404 of the Clean Water Act), or local environmental permits or applications.

FOREIGN SITE IDENTIFICATION NUMBER LIST

If the foreign site has an EPA assigned Identification (ID) Number listed below, fill out the GM Form Item 3.B and/or WR Form as you would for a domestic site, using this number on the list. If the site does not have an EPA assigned ID number on the list, report the code "FC" for foreign country followed by the name of the country in the space for the EPA ID Number. Enter the remaining information for that site as you would for a domestic facility. The following list is only a sample of foreign site ID number.

Site Name	Country	EPA ID Number
Bennett Environmental	Saint Ambroise	FCCA00000115
Centre de Recyclage Intermediaire	Ontario, Canada	FCCA00000069
ChemRec	Quebec, Canada	FCCA00000068
Chemtech	Quebec, Canada	FCCA00000081
Clean Harbors, Corunna	Ontario, Canada	FCCA00000004
Clean Harbors, London	Ontario, Canada	FCCA00000100
Clean Harbors Mercier	Quebec, Canada	FCCA00000120
Clean Harbors, Mississauga	Ontario, Canada	FCCA00000070
Clean Harbors, Thorold	Ontario, Canada	FCCA00000050
Clean Harbors Thurso	Quebec, Canada	FCCA00000121
Custom Environmental Svcs	Edmonton	FCCA00000104
Cyanide Destruct, Barrie	Ontario, Canada	FCCA00000099
Cyanide Destruction Systems, Markham	Ontario, Canada	FCCA00000073
Fielding Chemical	Ontario, Canada	FCCA00000119
Horizon Environmental Inc	Quebec, Canada	FCCA00000090
Imperial Oil, Sarnia	Ontario, Canada	FCCA00000058
Newalta Industrial Svcs, Fort Erie	Ontario, Canada	FCCA00000067
Nova PB	Ste Catherine	FCCA00000105
Outokumpu Harjavalta Metals OY	Harjavalta, Finland	FCFI00000005
Pinnacle Waste Services	Ontario, Canada	FCCA00000082
Samji Metals Ind Co Ltd	Ansaan City, Korea	FCKR00000125
Stablex Canada Inc.	Quebec, Canada	FCCA00000045
Thermonics	Doucherville, Quebec	FCCA00000078
Wha Chang Co Ltd	Haman-gun, Korea	FCKR00000124
Xstrata	New Brunswick, Canada	FCCA00000123
Zinc Nacional SA	Monterrey, Mexico	FCMX00000126

RCRA SUBTITLE C ACTIVITIES FORMS

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM



1. Reason for Submittal (Select only one.)

<input type="checkbox"/>	Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)
<input type="checkbox"/>	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
<input type="checkbox"/>	Site was a TSD facility and/or generator of > 1,000 kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in one or more months of the reporting year (or State equivalent LQG regulations)
<input type="checkbox"/>	Notifying that regulated activity is no longer occurring at this Site
<input type="checkbox"/>	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
<input type="checkbox"/>	Submitting a new or revised Part A Form

2. Site EPA ID Number

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3. Site Name

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4. Site Location Address

Street Address		
City, Town, or Village		County
State	Country	Zip Code

5. Site Mailing Address

Same as Location Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

6. Site Land Type

<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
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7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary)	C.
B.	D.

EPA ID Number

8. Site Contact Information

Same as Location Address

First Name	MI	Last Name
Title		
Street Address		
City, Town, or Village		
State	Country	Zip Code
Email		
Phone	Ext	Fax

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner

Same as Location Address

Full Name	Date Became Owner (mm/dd/yyyy)						
Owner Type							
<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
Street Address							
City, Town, or Village							
State	Country	Zip Code					
Email							
Phone	Ext	Fax					
Comments							

B. Name of Site's Legal Operator

Same as Location Address

Full Name	Date Became Operator (mm/dd/yyyy)						
Operator Type							
<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
Street Address							
City, Town, or Village							
State	Country	Zip Code					
Email							
Phone	Ext	Fax					
Comments							

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10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.

If "Yes" above, indicate other generator activities in 2 and 3, as applicable.

<input type="checkbox"/> Y <input type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.
<input type="checkbox"/> Y <input type="checkbox"/> N	3. Mixed Waste (hazardous and radioactive) Generator
<input type="checkbox"/> Y <input type="checkbox"/> N	4. Treater, Storer or Disposer of Hazardous Waste—Note: A hazardous waste Part B permit is required for these activities.
<input type="checkbox"/> Y <input type="checkbox"/> N	5. Receives Hazardous Waste from Off-site
<input type="checkbox"/> Y <input type="checkbox"/> N	6. Recycler of Hazardous Waste
<input type="checkbox"/>	a. Recycler who stores prior to recycling
<input type="checkbox"/>	b. Recycler who does not store prior to recycling
<input type="checkbox"/> Y <input type="checkbox"/> N	7. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

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11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)**A. Other Waste Activities**

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Transporter of Hazardous Waste—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Transporter	
<input type="checkbox"/> b. Transfer Facility (at your site)	
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Underground Injection Control
<input type="checkbox"/> Y <input type="checkbox"/> N	3. United States Importer of Hazardous Waste
<input type="checkbox"/> Y <input type="checkbox"/> N	4. Recognized Trader—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Importer	
<input type="checkbox"/> b. Exporter	
<input type="checkbox"/> Y <input type="checkbox"/> N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Importer	
<input type="checkbox"/> b. Exporter	

B. Universal Waste Activities

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If “Yes” mark all that apply. Note: Refer to your State regulations to determine what is regulated.
<input type="checkbox"/> a. Batteries	
<input type="checkbox"/> b. Pesticides	
<input type="checkbox"/> c. Mercury containing equipment	
<input type="checkbox"/> d. Lamps	
<input type="checkbox"/> e. Other (specify) _____	
<input type="checkbox"/> f. Other (specify) _____	
<input type="checkbox"/> g. Other (specify) _____	
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

<input type="checkbox"/> Y <input type="checkbox"/> N	1. Used Oil Transporter—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Transporter	
<input type="checkbox"/> b. Transfer Facility (at your site)	
<input type="checkbox"/> Y <input type="checkbox"/> N	2. Used Oil Processor and/or Re-refiner—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Processor	
<input type="checkbox"/> b. Re-refiner	
<input type="checkbox"/> Y <input type="checkbox"/> N	3. Off-Specification Used Oil Burner
<input type="checkbox"/> Y <input type="checkbox"/> N	4. Used Oil Fuel Marketer—If “Yes”, mark all that apply.
<input type="checkbox"/> a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner	
<input type="checkbox"/> b. Marketer Who First Claims the Used Oil Meets the Specifications	

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12. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR 262 Subpart K.

<input type="checkbox"/> Y <input type="checkbox"/> N	A. Opting into or currently operating under 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories—if “Yes”, mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
<input type="checkbox"/>	1. College or University
<input type="checkbox"/>	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/>	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/> Y <input type="checkbox"/> N	B. Withdrawing from 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories.

13. Episodic Generation

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If “Yes”, you must fill out the Addendum for Episodic Generator.
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14. LQG Consolidation of VSQG Hazardous Waste

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If “Yes”, you must fill out the Addendum for LQG Consolidation of VSQGs hazardous waste.
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15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

<input type="checkbox"/> Y <input type="checkbox"/> N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
	A. <input type="checkbox"/> Central Accumulation Area (CAA) or <input type="checkbox"/> Entire Facility
	B. Expected closure date: _____ mm/dd/yyyy
	C. Requesting new closure date: _____ mm/dd/yyyy
	D. Date closed : _____ mm/dd/yyyy
	<input type="checkbox"/> 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8)
	<input type="checkbox"/> 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)

16. Notification of Hazardous Secondary Material (HSM) Activity

<input type="checkbox"/> Y <input type="checkbox"/> N	A. Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27)? If “Yes”, you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.
<input type="checkbox"/> Y <input type="checkbox"/> N	B. Are you notifying under 40 CFR 260.43(a)(4)(iii) that the product of your recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate but that the recycling is still legitimate? If “Yes”, you may provide explanation in Comments section. You must also document that your recycling is still legitimate and maintain that documentation on site.

17. Electronic Manifest Broker

<input type="checkbox"/> Y <input type="checkbox"/> N	Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?
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18. Comments (include item number for each comment)

19. Certification I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. **Note: For the RCRA Hazardous Waste Part A permit Application, all owners and operators must sign (see 40 CFR 270.10(b) and 270.11).**

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
Printed Name (First, Middle Initial, Last)	Title

Email

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)

Printed Name (First, Middle Initial Last)	Title
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Email

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**ADDENDUM TO THE SITE IDENTIFICATION FORM:
NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY**



ONLY fill out this form if:

- You are located in a State that allows you to manage excluded hazardous secondary material (HSM) under 40 CFR 261.2(30), 261.4(a)(23), (24), or (27) (or state equivalent; See <https://www.epa.gov/epawaste/hazard/dsw/statespf.htm> for a list of eligible states; AND
- You are or will be managing excluded HSM in compliance with 40 CFR 260.30, 261.4(a)(23), (24), or (27) (or state equivalent) or have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section. Note: If your facility was granted a solid waste variance under 40 CFR 260.30 prior to July 13, 2015, your management of HSM under 40 CFR 260.30 is grandfathered under the previous regulations and you are not required to notify for the HSM management activity excluded under 40 CFR 260.30.

1. Reason for Notification (Include dates where requested)

Facility will begin managing excluded HSM as of _____ (mm/dd/yyyy).

Facility is still managing excluded HSM/re-notifying as required by March 1 of each even-numbered year.

Facility has stopped managing excluded HSM as of _____ (mm/dd/yyyy) and is notifying as required.

2. Description of Excluded HSM Activity. Please list the appropriate codes (see Code List section of the instructions) and quantities, in short tons, to describe your excluded HSM activity ONLY (do not include any information regarding your hazardous wastes). Use additional pages if more space is needed.

A. Facility Code	B. Waste Code(s) for HSM	C. Estimate Short Tons of excluded HSM to be managed annually	D. Actual Short Tons of excluded HSM that was managed during the most recent odd-numbered year	E. Land-based Unit Code

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**ADDENDUM TO THE SITE IDENTIFICATION FORM:
EPISODIC GENERATOR**



ONLY fill out this form if:

- You are an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves the generator to a higher generator category pursuant to 40 CFR 262 Subpart L.

Note: Only one planned and one unplanned episodic event are allowed within one year; otherwise, you must follow the requirements of the higher generator category. Use additional pages if more space is needed.

Episodic Event	
1. Planned	2. Unplanned
<input type="checkbox"/> Excess chemical inventory removal <input type="checkbox"/> Tank cleanouts <input type="checkbox"/> Short-term construction or demolition <input type="checkbox"/> Equipment maintenance during plant shutdowns <input type="checkbox"/> Other _____	<input type="checkbox"/> Accidental spills <input type="checkbox"/> Production process upsets <input type="checkbox"/> Product recalls <input type="checkbox"/> "Acts of nature" (Tornado, hurricane, flood, etc.) <input type="checkbox"/> Other _____
3. Emergency Contact Phone	4. Emergency Contact Name
5. Beginning Date _____ (mm/dd/yyyy)	6. End Date _____ (mm/dd/yyyy)

Waste 1

7. Waste Description	8. Estimated Quantity (in pounds)
9. Federal and/or State Hazardous Waste Codes	

Waste 2

7. Waste Description	8. Estimated Quantity (in pounds)
9. Federal and/or State Hazardous Waste Codes	

Waste 3

7. Waste Description	8. Estimated Quantity (in pounds)
9. Federal and/or State Hazardous Waste Codes	

ADDENDUM TO THE SITE IDENTIFICATION FORM:
LQG CONSOLIDATION OF VSQG HAZARDOUS WASTE



ONLY fill out this form if:

- You are an LQG receiving hazardous waste from VSQGs under the control of the same person. Use additional pages if more space is needed.

VSQG 1

1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

VSQG 2

1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

VSQG 3

1. EPA ID Number (if assigned)	2. Name	
3. Street Address		
4. City, Town, or Village	5. State	6. Zip Code
7. Contact Phone Number	8. Contact Name	
9. Email		

Appendix G

Fluorescent Bulb Recycling Vendors

FLUORESCENT LAMP RECYCLERS

Information provided below is provided on PADEP website:

<http://www.dep.pa.gov/Business/Land/Waste/SolidWaste/HazardousWaste/UniversalWastes/Pages/Fluorescent-Lamp-Recyclers.aspx>

The list of fluorescent lamp recyclers is for informational purposes only and in no way implies an endorsement by DEP or the Commonwealth.

AERC Recycling Solutions 2591 Mitchell Ave. Allentown, PA 18103-6609 610-797-7608 (Fax: 610-797-7696). www.aercrecycling.com	Air Cycle Corporation 2200 Ogden Ave. Suite 100 Lisle, IL 60532 800-909-9709
All Lamp Recycling, LLC. 310 Illinois St. Lemont, Illinois 60439 630-243-1000 (Fax: 630-257-2396) www.lightbulbrecycling.net	Bethlehem Apparatus 890 Front St. Hellertown, PA 18055 610-838-7034 www.bethlehemlamprecycling.com
Cleanlites Recycling, Inc. 665 Hull Road Mason, MI 48854 517-676-0044	Commonwealth Computer Recycling 1628 Roseytown Road, Suite 8 Greensburg, PA 15601 866-925-2354
Complete Recycling Solutions, LLC One Father DeValles Blvd. Fall River, MA 02747 Toll Free: 866-277-9797	Corporate Lamp & Electronic Recycling 500 North Walnut Road Kennett Square, PA. 19348 Phone: 610-444-0688 Fax: 610-444-5860 www.goCLER.com
Disposal Consultant Services, Inc. 50 Howard St. Piscataway, NJ 08854 800-846-7589	Earth Protection Services, Inc. 1823 William Penn Way, Suite 102 Lancaster, PA 17601 484-322-0300

<p><u>Eforce Compliance</u> 3114 Grays Ferry Ave Philadelphia, PA 19146 866-468-6935 Contact: Ted Miller</p>	Elwyn Industries 1 Judy Way Aston, PA 19014 215-527-4353
<p><u>EverLights.com</u> 9901 S Torrence Avenue Chicago, IL 60617 773-734-9873 Contact: Dan Kehoe</p>	Fluorescent & Ballast Recycling Company 112 Eisenhower Road Palmyra, PA 17078 717-473-3350 Contact: Ron Keesey
<p>Full Circle Inc. 509 Manida St. Bronx, NY 10474 800-775-1516 or local # 717-235-8710 Contact: Sean Fitzgerald</p>	<u>LampRecycling.com</u> 2200 Ogden Ave. Suite 100 Lisle, IL 60532 800-909-9709 Fax: 866-909-6725
<p>LEI Lamp Environmental Industries, Inc. 46257 Morris Road P.O. Box 2962 (70404-2962) Hammond, LA 70401 800-309-9908 Fax: 985-345-4775</p>	Lighting Resources 498 Park 800 Drive Greenwood, IN 46143 317-888-3889
<p><u>McCutcheon Enterprises, Inc.</u> 250 Park Road Apollo, PA 15613 724-568-3623 Fax: 724-568-2571</p>	Mercury Technologies of Minnesota, Inc. P.O. Box 13 Pine City, MN 55063-0013 800-864-3821
<p>Mercury Waste Solutions, Inc. 2007 West Country Road C-2 Roseville, MN 55113 612-628-9370</p>	<u>National Bulb Recycling Corp.</u> PO Box 127 Avon by the Sea, NJ 07717 732-455-8380
<p>National Environmental Services LLC P.O. Box 390407 Minneapolis, MN 55439-0407 800-872-2226</p>	Partners in Planet Protection 102 South Main St. Du Bois, PA 15801 484-467-2927
<p>Recyclelights.com 175 Strafford Ave., Suite One #405 Wayne, PA 02747 215-600-0766 ext 301, Fax: 215-475-3974 <u>www.recyclelights.com</u></p>	Safety-Kleen 5400 Legacy Dr., Cluster II Bldg 3 Plano, TX. 75024 800-669-5840

<p>Schaedler yesco 3982 Paxton St. Harrisburg, PA 17111-0990 800-998-1621 www.sydist.com</p>	<p>Scott Electric PO Box S 1000 South Main St. Greensburg, PA 15601-4899 800-442-8045</p>
<p>Southeast Recycling Technologies, Inc. P.O. Box 845 906 Chase Drive Johnson City, TN 37604 423-282-2022</p>	<p>Southern Recycling, Inc. 4455 Southern Pine St. Spartanburg, SC 29302 864-597-1566</p>
<p>Unlimited Recycling, Inc. 30370 School Section Road Richmond, MI 48062 810-784-4980</p>	<p>USA Lamp & Ballast Recycling 5366 Este Ave. Cincinnati, OH 45232 800-778-6645</p>
<p>USA LIGHTS Environmental Preservations Associates Inc. 3408 52nd Ave. Hyattsville, MD 20781 301-699-6244</p>	<p>Veolia Environmental Services 218 Canton St. Stoughton, MA 02072 800-556-5257</p>
<p>WeRecycle!, Inc. 500 South Broad St. Meridan, CT 06450 877-937-3292</p>	

Appendix H

Special Handling Waste Forms

Asbestos EPA Approval Letter

Asbestos Notification Form and Instructions

JAN-23-2002 15:43 EPA RCRA
INCLULAL WRECKING

215 814 3114 P.02/03
TRANSMISSIONS DOWNGR. Jan 2002 11:01 P.02
4002



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 11 1996

96-2
OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Joseph E. Moore
Department of Planning and Development
6901 Delmar Boulevard
University City, Missouri 63130

Dear Mr. Moore:

This is in response to your February 5, 1996, letter to Mr. Greg Crable, and your May 16, 1996, letter to Ms. Judy Sturges, requesting an interpretation of the Environmental Protection Agency's (EPA's) current asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP).

In your letters you write that the City of University City periodically finds it necessary to condemn a building and order its demolition due to the fact that the building constitutes a public nuisance or is in danger of collapse. You also write that it is your understanding that if the buildings are residential buildings having four or fewer dwelling units, are geographically dispersed throughout the city, and are not being removed for public improvements such as roadways, parks, or airport expansion, that they would be completely exempt from the NESHAP standards.

Your understanding that isolated residential buildings are not regulated under the NESHAP is correct. EPA published a notice of clarification in the Federal Register (enclosed) that describes the Agency's position regarding the demolition of residential buildings.

It is written that:

"EPA is publishing this notice to clarify that, in EPA's opinion, the demolition or renovation of an isolated small residential building by any entity is not covered by the asbestos NESHAP. This notice does not affect EPA's policy regarding demolition by fire."



ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM

Complete all applicable sections of the notification. Fax copies are not accepted, as the notification must be certified with an **original signature**. To avoid a violation by failure to report, it would be prudent to submit a notification regardless of friability of materials. This form is used to satisfy the notification requirements of the following agencies:

- PA Department of Environmental Protection
- PA Department of Labor and Industry
- US Environmental Protection Agency
- Allegheny County Health Department
- City of Philadelphia Department of Public Health

Questions relative to specific filing requirements and enforcement regulations should be directed to the governing agency. Addresses and phone numbers are provided. **Do not mail original notifications to the Department of Labor and Industry.**

Special Notations:

- All REVISIONS to a previous notification should be highlighted
- Item #5 - Check the box that best describes the entire project
- Item #6 - The "Job No." portion of this Item is provided for those contractors who assign a unique job # to their projects
- Item #12 - Please provide the information in the format requested
- If additional space is needed for any descriptive text, please continue on a blank sheet, and attach

The PA DEP Central Office is no longer processing the asbestos demo/reno notification form. Do not send the notification form to the P.O. Box 8468 or the 400 Market Street, Harrisburg address. The notification submission addresses, listed below, are to be used depending on the county location of your project:

If the facility address is in Bucks, Chester, Delaware, or Montgomery Counties, send your notification information to:
PA DEP Southeast Region
Asbestos Notification
2 East Main Street
Norristown, PA 19401-4915
Telephone: 484-250-5920

If the facility address is in Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, or Wyoming Counties, send your notification information to:
PA DEP Northeast Region
Asbestos Notification
2 Public Square
Wilkes-Barre, PA 18701-1915
Telephone: 570-826-5547

If the facility address is in Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, or York Counties, send your notification information to:

PA DEP Southcentral Region
Asbestos Notification
909 Elmerton Avenue
Harrisburg, PA 17110-8200
Telephone: 717-705-4702

If the facility address is in Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, or Union Counties, send your notification formation to:
PA DEP Northcentral Region
Asbestos Notification
208 West Third Street, Suite 101
Williamsport, PA 17701-6448
Telephone: 570-321-6580

Instructions

If the facility address is in Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, or Westmoreland Counties, send your notification formation to:

PA DEP Southwest Region

Asbestos Notification

400 Waterfront Drive

Pittsburgh, PA 15222-4745

Telephone: 412-442-5214 for Armstrong, Beaver, Greene, and Washington Counties

Telephone: 724-925-5428 for Cambria, Fayette, Indiana, Somerset, and Westmoreland Counties

If the facility address is in Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, or Warren Counties, send your notification formation to:

PA DEP Northwest Region

Asbestos Notification

230 Chestnut Street

Meadville, PA 16335-3481

Telephone: 814-332-6634

For projects in Allegheny County or the City of Philadelphia, this form must be submitted to the appropriate address, directly following. Allegheny County requires two copies, the City of Philadelphia, three. If this project requires a permit application, it must be approved prior to the start of the project, and 2 copies must be included with the notification. A copy of the facility inspection survey must also be included for all demolition projects. Do not send these documents directly to Harrisburg.

Allegheny County Health Department
Air Quality Program
Building 7
301 39th Street
Pittsburgh, PA 15201-1891
Attn: Asbestos Abatement Permitting

City of Philadelphia
Department of Public Health
Air Management Services
Asbestos Control Unit
321 University Avenue
Philadelphia, PA 19104-4597

Allegheny County - A permit is required if the project involves at least 260 linear feet or 160 square feet of any asbestos containing material. For Item #10, the survey must be included for demolition projects. Item #25 should be signed by the Contractor. Item #26 should be signed by the Facility Owner. Information can be obtained by calling 412-578-8133.

City of Philadelphia - A permit is required if the project involves 80 or more square feet or 40 or more linear feet of friable asbestos containing material and does not involve an exempted private residence. Information can be obtained by calling 215-685-7576.

If this project is regulated by the Asbestos NESHAP, a photocopy of this notification must be sent to EPA Region III at the address directly following. EPA's telephone number is 215-814-2164/215-814-2135.

Asbestos NESHAP Coordinator (3WC32)
US EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Questions regarding completion of the notification form should be directed to 717-772-3993/717-787-9257 or the appropriate enforcement agency as listed.

REMINDER: Notifications must contain original signatures for items 25 and 26 or they will be returned to the sender, unprocessed. If a notification is returned for original signature, the ten-day reporting period will begin with the postmark date of the resubmitted notification with original signature.

STATE AND LOCAL AGENCY CONTACTS

City of Philadelphia

City of Philadelphia
Department of Public Health
Air Management Services
Asbestos Control Unit
321 University Avenue
Philadelphia, PA 19104-4597
215-685-7576

Allegheny County

Allegheny County Health Department
Air Quality Program
Building 7
301 39th Street
Pittsburgh, PA 15201-1891
412-578-8133

Labor & Industry Contact

Department of Labor and Industry
Bureau of Occupational and Industrial Safety
Seventh and Forster Streets - Room 1623
Harrisburg, PA 17120
717-772-3396

ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM
For Official Use Only

Date Received 1

Date Received 2

Postmark Date: _____
 Project ID#: _____
 Permit #: _____
 Other #: _____
 Inspector: _____

--	--

NOTICE: This is not a valid asbestos abatement notification for the purposes of the Asbestos Occupations Accreditation and Certification Act unless individuals and contractors have met the certification requirements as set forth in the Asbestos Occupations Accreditation and Certification Act, Act of 1990, P.L. 805, No. 194 (63 P.S. Sections 2101-2112).

REFER TO THE ATTACHED INSTRUCTIONS FOR INFORMATION AND REQUIREMENTS.

1. TYPE OF NOTIFICATION (check one):		<input type="checkbox"/> Initial	<input type="checkbox"/> Annual Notification
<input type="checkbox"/> Revision (highlight here, and changes)		<input type="checkbox"/> Phase of Annual Notification	
<input type="checkbox"/> Postponement		<input type="checkbox"/> Cancellation	
Date of Initial Notification or, if previously revised, date of last revision: _____			
2. PROJECT LOCATION (check one):		<input type="checkbox"/> Allegheny County	<input type="checkbox"/> City of Philadelphia
		<input type="checkbox"/> Other Location in PA (specify county): _____	
		<input type="checkbox"/> Municipality (specify): _____	
3. FOR ALLEGHENY COUNTY AND CITY OF PHILADELPHIA PROJECTS ONLY:			
A. Does this project require a permit? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes is checked, a permit application must be submitted along with this notification and approved prior to the start of the project.)			
B. For City of Philadelphia projects requiring a permit:			
Asbestos project inspector: _____		Certification #: _____	
Company name: _____			
Address: _____			
City: _____		State: _____	Zip: _____
		Phone: _____	
4. WILL ALTERNATIVE METHODS TO ANY OF THE APPLICABLE REGULATIONS BE USED? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes is checked, approval must be obtained prior to the start of the project. Please contact the appropriate DEP regional office or local government agency (see reverse of Instruction Sheet for contact list).			
5. TYPE OF OPERATION (check all that apply):		<input type="checkbox"/> Abatement prior to Demolition	
<input type="checkbox"/> Demolition		<input type="checkbox"/> Renovation	<input type="checkbox"/> Emergency Renovation
6. FACILITY DESCRIPTION:		Job No.: _____ (see instructions)	
Facility Name: _____			
Street/Rural Address: _____			
City: _____		State: PA	Zip Code: _____
Present use: _____		Prior use: _____	
Will the facility be occupied during the abatement activity? <input type="checkbox"/> Yes		<input type="checkbox"/> No	
Facility size in square feet: _____		# of floors: _____	
		Age in years: _____	
7. ABATEMENT CONTRACTOR:			
Company name: _____			
Allegheny County or City of Philadelphia License # (if applicable): _____			
Street/Rural/POB Address: _____			
City: _____		State: _____	Zip: _____
Contact: _____		Telephone No. (between 8:00 & 4:30): _____	

<p>8. DEMOLITION CONTRACTOR:</p> <p>Company name: _____</p> <p>Street/Rural/POB Address: _____</p> <p>City: _____ State: _____ Zip: _____</p> <p>Contact: _____ Telephone No. (between 8:00 & 4:30): _____</p>							
<p>9. FACILITY OWNER:</p> <p>Owner name: _____</p> <p>Street/Rural/POB Address: _____</p> <p>City: _____ State: _____ Zip: _____</p> <p>Contact: _____ Telephone No. (between 8:00 & 4:30): _____</p>							
<p>10. FACILITY INSPECTION (required for renovation and demolition projects):</p> <p>Building inspector: _____ Certification #: _____</p> <p>Date of inspection: _____ Is any material assumed to be asbestos? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Procedure, including analytical method, if appropriate, used to detect the presence of asbestos material: _____</p> <p><input type="checkbox"/> Building is ID and in danger of collapse. An asbestos investigator will be on site during demolition. (Philadelphia only)</p>							
<p>11. IS ANY TYPE OF ASBESTOS PRESENT? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, please list in #12.</p>							
<p>12. TYPE OF ACM, DESCRIPTION & LOCATION OF MATERIAL, APPROXIMATE AMOUNT OF ACM, TYPE OF ABATEMENT AND FINAL AIR CLEARANCE METHOD.</p> <p>PROVIDE INFORMATION IN THE SPACES BELOW, THEN CONTINUE ON ANOTHER SHEET, IF NECESSARY, USING THE SAME FORMAT.</p>							
Code *	Description of material	Location of material (room/floor/area)		Amount of ACM	Code **	Code ***	Code ****
Code *	Code **	Code ***	Code ****				
Type of ACM	Units	Type of abatement	Final Clearance				
FRI - Friable ACM NF1 - Cat I nonfriable ACM NF2 - Cat II nonfriable ACM (Note: Allegheny County treats all ACM as friable)	LF - Linear ft. SF - Square ft. CF - Cubic ft.	REM - Removal CAP - Encapsulation CLO - Enclosure NON - None	PCM - Phase contrast microscopy TEM - Transmission electron microscopy				
<p>13. Is this project regulated by NESHAP? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>A project that includes the demolition of any defined "facility" is regulated by NESHAP. A renovation project is also regulated by NESHAP when the amounts of friable ACM, or ACM that may be rendered friable, are as follows: 260 LF or 160 SF or 35 CF.</p>							

14. OPERATION SCHEDULE(S) (as applicable):									
A. Asbestos abatement:		Start Date: _____		Completion Date: _____					
Daily hours of operation: _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm		to _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm			
Days of week (check): <input type="checkbox"/> Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su									
B. Demolition:		Start Date: _____		Completion Date: _____					
Daily hours of operation: _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm		to _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm			
Days of week (check): <input type="checkbox"/> Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su									
C. Renovation:		Start Date: _____		Completion Date: _____					
Daily hours of operation: _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm		to _____		_____ <input type="checkbox"/> am <input type="checkbox"/> pm			
Days of week (check): <input type="checkbox"/> Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su									
COMMENTS: _____ _____									
15. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK: _____ _____									
16. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO REMOVE ACM AND TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE: _____ _____									
17. WASTE TRANSPORTER(S):									
A. Transporter #1 name: _____									
Street/Rural Address: _____									
City: _____ State: _____ Zip: _____									
Contact: _____ Telephone: _____									
B. Transporter #2 name: _____									
Street/Rural Address: _____									
City: _____ State: _____ Zip: _____									
Contact: _____ Telephone: _____									

18. WASTE DISPOSAL SITE(S) (any asbestos containing material):

A. Landfill name: _____ DEP permit #: _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____

B. Landfill name: _____ DEP permit #: _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____

19. AIR MONITORING FIRM(S):

A. Company name/individual: _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____

B. Final clearance firm: (if different than 19A) _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____
 Final clearance firm was hired by (check one): Contractor Owner
 Other: Explain: _____

20. AIR SAMPLE FIRM(S) (City of Philadelphia projects only):

A. PCM company name/individual: _____ Certification #: _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____

B. TEM company name: _____ Certification #: _____
 Street/Rural Address: _____
 City: _____ State: _____ Zip: _____
 Contact: _____ Telephone: _____

21. FOR EMERGENCY RENOVATIONS:

Date of emergency (mm/dd/yy): _____ Hour of emergency: _____ am pm
 Description of the sudden, unexpected event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden as a consequence of complying with the 10 working day notification requirement:

22. FOR ORDERED DEMOLITIONS (attach copy of order):

Government agency that ordered: _____

Name of individual who ordered: _____ Title: _____

Date of order (mm/dd/yy): _____ Date ordered to begin (mm/dd/yy): _____

23. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:

24. PENNSYLVANIA CERTIFICATIONS/LICENSES:

Project designer: _____ Certification #: _____

Contractor (Individual): _____ Certification #: _____

Supervisor: _____ Certification #: _____

Contractor (Firm): _____ Certification #: _____

*** * * * * SIGN BOTH STATEMENTS * * * * ***

25. I HEREBY CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF 40 CFR PART 61 SUBPART M (if applicable) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING ALL WORKING HOURS, AND I CERTIFY THAT ALL WORK WILL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCY RULES AND REGULATIONS.

(Original Signature of Owner/Operator)

(Date)

Printed Name of Owner/Operator: _____ Title: _____

26. I HEREBY CERTIFY THAT THE FOREGOING STATEMENTS AND THE INFORMATION CONTAINED IN THIS NOTIFICATION FORM ARE TRUE. THIS CERTIFICATION IS MADE SUBJECT TO THE PENALTIES SET FORTH IN 18 PA C.S. §4904 RELATING TO UNSWORN FALSIFICATION TO AUTHORITIES.

(Original Signature of Owner/Operator)

(Date)

Printed Name of Owner/Operator: _____ Title: _____

FOR OFFICIAL USE ONLY

Infectious and Chemotherapeutic Waste

REGULATED MEDICAL AND CHEMOTHERAPEUTIC WASTE SHIPPING LOG

1. Generator's Name and Mailing Address												
2. Generator's Phone Number () - 3. Page 1 of _____												
4. Transporter 1 Company Name						5. US EPA ID Number						
6. State Trans. ID PA-HC:						7. Transporter's Phone () -						
8. Transporter 2 Company Name 9. US EPA ID Number												
10. State Trans. ID PA-HC:						11. Transporter's Phone () -						
12. Designated Facility Name and Site Address:						13. State Permit or US EPA ID Number						
						14. Facility's Phone () -						
15. Alternate Facility Name and Site Address or Transporter 3 Company Name:						16. State Permit or US EPA ID Number						
						18. Phone () -						
17. State Trans. ID PA-HC:												
19. US DOT Description (Including Proper Shipping Name, Hazard Class/Division, ID Number)				20. Containers			21. Total Quantity			22. Unit Wt/Vol	23. Waste No.	
				No.	Type							
a.												
b.												
c.												
d.												
24. Special Handling Instructions and Additional Information <i>Waste Generated from Emergency Response Activities (i.e. abandoned waste / vehicular accident) located in PENNDOT right-of-way. NOT generated by PENNDOT operations. [PA Chapter 284.632(c)]</i>												
25. Generator's Certification: Under penalty of criminal or civil sanctions for the making or submission of false statements, misrepresentations, or omissions, I declare, that the contents of this consignment are fully and accurately described above and are classified, packaged, marked, and labeled in accordance with all applicable State and Federal laws and regulations, and that I have been authorized to make such declarations.												
Printed/Typed Name			Signature						Month	Day	Year	
26. TRANSPORTER 1 ACKNOWLEDGMENT OF RECEIPT OF MATERIALS												
Printed/Typed Name			Signature						Month	Day	Year	
27. TRANSPORTER 2 ACKNOWLEDGMENT OF RECEIPT OF MATERIALS												
Printed/Typed Name			Signature						Month	Day	Year	
28. TRANSPORTER 3 ACKNOWLEDGMENT OF RECEIPT OF MATERIALS												
Printed/Typed Name			Signature						Month	Day	Year	
29. Discrepancy Indication Space												
30. Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in item 29.												
Printed/Typed Name			Signature						Month	Day	Year	

Copy 1 *TSD Facility: Mail to Generator*

Copy 2 *TSD Facility: Retain This Copy*

Copy 3 *Final Transporter: Retain This Copy*

Copy 3 A *Initial Transporter: Retain This Copy*

Copy 3 B *Second Transporter: Retain This Copy*

Copy 4 *Generator: Retain this Copy*

INSTRUCTIONS FOR COMPLETING FORM 2500-FM-BWM0240

- Item 1. Generator's Name and Mailing Address - Enter the complete name of the generator and the complete mailing address. The address should be the location that will manage the returned shipping log.
- Item 2. Generator's Phone Number - Enter the area code and telephone number where an authorized agent of the Generator may be contacted.
- Item 3. Page 1 of ____ - Enter the total number of pages used to complete this shipping log including the first page plus the number of Continuation Sheets, if any.
- Item 4. Transporter 1 Company Name - Enter the company name of the first transporter who will transport the waste.
- Item 5. US EPA ID Number - Enter the twelve digit US EPA Identification Number of the transporter identified in item 4.
- Item 6. State Trans. ID - Enter the Regulated Medical and Chemotherapeutic Waste Transporter License No. issued by PA DEP.
- Item 7. Transporter's Phone - Enter the area code and telephone number where an authorized agent of the transporter may be contacted.
- Item 8. Transporter 2 Company Name - if applicable, see Item 4.
- Item 9. US EPA ID Number - If applicable, see item 5.
- Item 10. State Trans. ID - If applicable, see Item 7.
- Item 11. Transporter's Phone - If applicable, see Item 7.
- Item 12. Designated Facility Name and Site Address - Enter the complete company name and complete site address of the facility designated to receive the waste listed on the shipping log. The address must be the site address, which may be different from the mailing address.
- Item 13. State Permit or US EPA ID Number - Enter the State Permit Number that has been assigned to the facility by the Department or the US EPA ID Number of the site.
- Item 14. Facility's Phone - Enter the area code and the phone number where an authorized agent of the Designated Facility may be contacted.
- Items 15-18. Alternate Facility or Transporter 3 - If designating an Alternate Facility see Items 12-14. If designating Transporter 3 see Items 4-7. (Note: If designating an Alternate Facility and Transporter 3, enter the Alternate Facility information in Items 15, 16 and 18 and Transporter 3 information in Item 24.)
- Item 19. US DOT Description - Enter the Proper Shipping Name, hazard class or division and Identification Number if the Waste is an Infectious Substance as defined in §173.134 of 49 CFR of the regulations of the U.S. Department of Transportation. Otherwise, enter a description of the waste.
- Item 20. Containers (No. and Type) - Enter the number of containers for each waste and the appropriate abbreviation from Table 1 (below) for the type of container.

TABLE I – TYPE OF CONTAINERS

DM = Metal drums, barrels, kegs	BA = Burlap, cloth paper or plastic bags
DW = Wooden drums, barrels, kegs	DT = Dump Truck
DF = Fiberboard or plastic drums	CY = Cylinders
TP = Tanks portable	CM = Metal boxes, barrels, kegs Cartons, cases, (including roll offs)
CW = Wooden boxes, carton, cases	CF = Fiber or plastic boxes, cartons, cases

- Item 21. Total Quantity – Enter the total quantity of each waste entered (Do not use decimals or fractions).
- Item 22. Unit (Wt/Vol) – Enter the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II – UNITS OF MEASURE

G = Gallons (liquids only)	L = Liters (liquids only)
P = Pounds	K = Kilograms
T = Tons (2000 lbs)	M = Metric tons (1000 kg)
Y = Cubic yards	N = Cubic meters

Item 23. Waste No. – Enter the Regulated Medical and Chemotherapeutic Waste No. of the waste or wastes. Refer to Table III (below). If the waste is not regulated in PA but regulated in another State, enter the State's waste code. Also, enter in Item 24 "This waste is not a PA Regulated Medical or Chemotherapeutic Waste".

TABLE III – WASTE NUMBERS

A100 – REGULATED MEDICAL WASTE

A200 - PROCESSED REGULATED MEDICAL WASTE THAT IS RECOGNIZABLE

A300 – CHEMOTHERAPEUTIC WASTE

Item 24. Special Handling Instructions and Additional Information – Use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. For international shipments, enter the point of departure (City and State). Transporter 3 information is also entered in this Item if an Alternate Facility is designated.

Item 25. Generator's Certification – Read and sign by hand the certification statement. Enter the date (MM/DD/YY) the waste was shipped.

Item 26. Transporter 1 Acknowledgement of Receipt of Materials – Print or type the name of the person accepting the waste on behalf of the transporter. Sign and enter the date of receipt (MM/DD/YY).

Item 27. Transporter 2 Acknowledgement of Receipt – If applicable see Item 26.

Item 28. Transporter 3 Acknowledgement of Receipt – If applicable see Item 26.

Item 29. Discrepancy Indication Space – The Designated Facility's authorized representative must note in this space any significant discrepancy between the waste on the shipping log and the waste actually received.

Item 30. Facility Owner or Operator Certification of receipt of regulated medical or chemotherapeutic waste covered by this shipping log except as noted in Item 29 – Print or type the name of the person accepting the waste on behalf of the owner or operator of the facility. Sign and enter the date of receipt (MM/DD/YY).

NOTE: If the Alternate Facility receives the waste shipment and signs in Item 30, it should be noted in Item 29 that the signature is that of the Alternate Facility.

Appendix I

Management Fill Policy

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Waste Management

DOCUMENT NUMBER: 258-2182-773

EFFECTIVE DATE: Upon publication of notice as final in the *Pennsylvania Bulletin*

TITLE: Management of Fill

AUTHORITY: This document is established in accordance with the Act of July 7, 1980, as amended, 35 P.S. §§ 6018.101 *et seq.*, known as the Solid Waste Management Act (SWMA); the Act of June 22, 1937, as amended, 35 P.S. §§ 691.1 *et seq.*, known as the Clean Streams Law; the Act of April 9, 1929, Section 1917-A of the Administrative Code, 71 P.S. § 510-17; the Act of July 18, 1995, 35 P.S. §§ 6026.101 *et seq.*, known as the Land Recycling and Environmental Remediation Standards Act.

POLICY: This policy is designed to replace the Department of Environmental Protection's (DEP or Department) existing Clean Fill Policy dated August 7, 2010.

PURPOSE: This policy provides DEP's procedures for determining whether material is clean fill or regulated fill. Regulated fill may not be used unless a SWMA permit is secured by the individual or entity using the regulated fill.

APPLICABILITY: This policy shall be used to evaluate whether material qualifies as clean fill or regulated fill. This policy does not apply to mine land reclamation activities subject to a permit. Excavation, movement or reuse of fill material within a project area or right-of-way of a project is not an activity that requires a SWMA permit.

DISCLAIMER: The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of the DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 17 pages

DEFINITIONS:

Act 2 - The Land Recycling and Environmental Remediation Standards Act, Act of May 18, 1995 (P.L. 4, No. 1995-2), 35 P.S. §§ 6026.101 et seq.

Clean fill - Uncontaminated, nonwater-soluble, nondecomposable inert solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such. (25 Pa. Code §§ 271.101 and 287.101) The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized.

Environmental due diligence - Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of ownership and use history of property, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

Historic fill - Material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to 1988 that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition waste. The term does not include iron or steel slag that is separate from residuals if it meets the coproduct definition and the requirements of 25 Pa. Code § 287.8. The term does not include coal ash that is separate from residuals if it is beneficially used in accordance with 25 Pa. Code § 287.661 - 287.666.

Regulated fill - Soil, rock, stone, dredged material, used asphalt, historic fill, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such that has been affected by a spill or release of a regulated substance and the concentrations of regulated substances exceed the values in Appendix B, Tables FP-1a (Organic Constituents) and FP-1b (Metals and Inorganic Constituents).

Regulated substance - The term shall include hazardous substances and contaminants regulated under the Hazardous Sites Cleanup Act, and substances covered by the Clean Streams Law, the Air Pollution Control Act, the Solid Waste Management Act, the Infectious and Chemotherapeutic Waste Law, and the Storage Tank and Spill Prevention Act.

Release - Spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a regulated substance into the environment in a manner not authorized by the Department of Environmental Protection. The term includes the abandonment or discarding of barrels, containers, vessels and other receptacles containing a regulated substance.

Uncontaminated material - Material unaffected by a spill or release of a regulated substance, or if affected by a spill or release, the concentrations of regulated substances are below the numerical values specified in Appendix B, Tables FP-1a and FP-1b.

REFERENCES:

25 Pa. Code Chapters 287 to 299 (residual waste regulations)

25 Pa. Code Chapters 271 to 285 (municipal waste regulations)

Solid Waste Management Act, 35 P.S. §§ 6018.101 et seq.

Land Recycling and Environmental Remediation Standards Act, 35 P.S. §§ 6026.101 et seq.

TECHNICAL GUIDANCE:

FILL DETERMINATION

- 1) To determine whether fill is clean or regulated, a person must perform environmental due diligence.¹
 - a) If due diligence shows no evidence of a release of a regulated substance, the material may be managed as clean fill under this policy.
 - b) If due diligence shows evidence of a release, the material must be tested to determine if it qualifies as clean fill. Testing must be performed in accordance with Appendix A.
 - i) If testing reveals that the material contains concentrations of regulated substances that are below the appropriate numerical limits for residential use in Appendix B, Tables FP-1a and FP-1b, the material must be managed as clean fill.
 - ii) If testing reveals that the material contains concentrations of regulated substances that exceed the numerical limits for residential use in Appendix B, Tables FP-1a and FP-1b, the material must be managed as regulated fill.
- 2) A person may not blend or mix materials to become clean fill. Materials that contain regulated substances that are intentionally released may not be managed under this policy.

MANAGEMENT OF REGULATED FILL

- 1) Materials identified as regulated fill are waste and must be managed in accordance with the Department's municipal or residual waste regulations, whichever is applicable, based on 25 Pa. Code §§ 287.2 or 271.2. Regulated fill may be beneficially used under General Permit WMGR096 (regulated fill as defined in Guidance Document 258-2182-773 (Management of Fill)) if the materials and the proposed activities for the fill meet the conditions of that permit. A person may apply for an industry-wide beneficial use general permit for the beneficial use of regulated fill in lieu of this general permit.
- 2) Regulated fill may not be placed on a greenfield property not planned for development, or on a property currently in residential use or planned for residential use unless otherwise authorized.
- 3) Fill containing concentrations of regulated substances that exceed the values in Tables GP-1a and GP-1b of General Permit WMGR096 may not be managed under the provisions of this policy or General Permit WMGR096, but must be otherwise managed in accordance with the provisions of the Department's municipal or residual waste regulations.
- 4) A general permit is not required for remediation activities undertaken entirely on an Act 2 site pursuant to the requirements of Section 902 of the Land Recycling and Environmental Remediation Standards Act. A general permit is also not required if regulated fill from an Act 2 site is used as construction material at a receiving site that is being remediated to attain an Act 2

¹ Analytical assessment, testing or sampling is only required if visual inspection or reviews of historic property use indicates evidence of a release of a regulated substance.

standard as long as the procedural and substantive requirements of Act 2 are met. Regulated substances contained in the regulated fill must be incorporated into the notice of intent to remediate and the final report. Movement of regulated fill between Act 2 sites must be documented in both the sending and receiving sites' cleanup plans and final reports. Placement of the regulated fill may not cause the receiving site undergoing remediation to exceed the selected Act 2 standard.

MANAGEMENT OF CLEAN FILL

- 1) Use of material as clean fill does not require a permit under the Solid Waste Management Act and regulations, and it may be used in an unrestricted or unregulated manner under this Act and its regulations. The use of materials as clean fill is still regulated under other environmental laws and regulations. A person using materials as clean fill under this policy is still subject to and must comply with all applicable requirements governing the placement or use of material as clean fill, such as Chapter 102 (Erosion and Sediment Control) and Chapter 105 (Dam Safety and Waterway Management).
- 2) Any person placing clean fill which has been affected by a release of a regulated substance on a property must certify the origin of the fill material and results of analytical testing to qualify the material as clean fill on Form FP-001 (Certification of Clean Fill). Form FP-001 must be retained by the owner of the property receiving the clean fill.
- 3) Best management practices (BMP) must be followed prior to demolition activities to remove materials like lead-based paint surface, friable asbestos and hazardous materials such as mercury switches, PCB ballasts and fluorescent light bulbs from a building if the brick, block, or concrete is used as clean fill.
- 4) Clean fill may not contain any free liquids based on visual inspection, and shall not create public nuisances (for example objectionable odors) to users of the receiving property or adjacent properties.

Sampling and Analyses for Regulated Material to be Used as Fill

Sampling of regulated material proposed to be used as fill shall be done either by composite samples or by discrete samples. Sampling in either case shall be random and representative of the entire fill material being sampled. Sampling shall be in accordance with the most current version of the EPA RCRA Manual, SW-846 (*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response*).

- (a) Sampling based on composite sampling procedures shall include the following:
 - (i) For volumes of material equal to or less than 125 cubic yards, a total of ten samples shall be collected and analyzed as follows:
 - (A) For analysis of all substances other than volatile organic compounds (VOCs), the samples shall be analyzed in two composites of four samples each, in accordance with the most current version of the USEPA Manual, SW-846.
 - (B) Two samples shall be selected from the eight samples for analysis of VOCs. The samples shall be based on field screening of the eight samples to select those samples that are most likely to contain the highest concentrations of VOCs.
 - (C) Two grab samples shall be taken from the same areas in the material from which the two samples used for field screening of VOCs were taken, in accordance with Method 5035 from the most current version of the USEPA Manual, SW-846.
 - (ii) For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a total of 15 samples shall be collected and analyzed as follows:
 - (A) For analysis of all substances other than VOCs, the samples shall be analyzed in three composites of four samples each.
 - (B) Three samples shall be selected from the 12 samples for analysis of VOCs. The samples shall be based on field screening of the 12 samples to select those samples that are most likely to contain the highest concentrations of VOCs.
 - (C) Three grab samples shall be taken from the same areas in the material from which the three samples used for field screening of VOCs were taken, in accordance with EPA Method 5035, referenced in subparagraph (i)(C).
 - (iii) For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, 15 additional samples shall be collected and analyzed as follows:
 - (A) For analysis of all substances other than VOCs, the samples shall be analyzed in three composites of four samples each.
 - (B) Three samples for analysis of VOCs shall be selected from the 12 samples for analysis of VOCs. The samples shall be based on field screening of the

12 samples to select those samples that are most likely to contain the highest concentrations of VOCs.

- (C) Three grab samples shall be taken from the same areas in material from which the three samples used for field screening of VOCs were taken, in accordance with EPA Method 5035, referenced in subparagraph (i)(C).
- (b) Sampling based on discrete sampling procedures shall include the following:
 - (i) For volumes of material equal to or less than 125 cubic yards, a minimum of ten samples shall be collected and analyzed. For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a minimum of 15 samples shall be collected and analyzed. For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, a minimum of 15 additional samples shall be collected and analyzed.
 - (ii) For VOCs analysis, grab sampling procedures shall be the procedures described in subsection (a) for the equivalent volumes of material sampled.
- (c) Evaluation of results:
 - (i) For a composite sample taken in accordance with subsection (a), the measured numeric value for a parameter shall be less than or equal to the numerical limit listed in Appendix B, Table FP-1a or FP-1b for that parameter in order for the material to qualify as clean fill, or in Table GP-1a or GP-1b of General Permit WMGR096 for that parameter in order for the fill material to qualify as regulated fill.
 - (ii) For a grab sample, taken in accordance with subsections (a) and (b), the measured numeric value for a parameter shall be less than or equal to the numerical limit listed in Appendix B, Table FP-1a or FP-1b for that parameter in order for the material to qualify as clean fill, or in Table GP-1a or GP-1b of General Permit WMGR096 for that parameter for the fill material to qualify as regulated fill.
 - (iii) For discrete samples required in subsection (b), the measured numeric values for a substance in 75% of the discrete samples shall be equal to or less than the numerical limit listed in Appendix B, Table FP-1a or FP-1b, or in Table GP-1a or GP-1b of General Permit WMGR096 for that parameter with no single sample exceeding more than twice the concentration limit for a parameter.
- (d) In lieu of subsection (c), a person may use 95% Upper Confidence Limit (UCL) of the arithmetic mean to determine whether a fill material meets the appropriate concentration limits for use as clean or regulated fill. The calculated 95% UCL of the arithmetic mean must be below the appropriate concentration limit for clean or regulated fill. Sampling shall be random and representative of the material being sampled. The minimum number of samples shall be determined in accordance with EPA-approved methods on statistical analysis of environmental data, as identified in 25 Pa. Code, § 250.707(e) (relating to statistical tests). The application of the 95% UCL of the arithmetic mean shall comply with the following performance standards:

- (i) The null hypotheses (H_0) shall be that the true fill arithmetic average concentration is at or above the regulated fill appropriate concentration limit, and the alternative hypothesis (H_a) shall be that the true fill arithmetic average concentration is below the regulated fill appropriate concentration limit.
- (ii) The underlying assumptions of the statistical method shall be met, such as data distribution.
- (iii) Compositing cannot be used for volatile organic compounds.
- (iv) The censoring level for each nondetect shall be the assigned value randomly generated that is between zero and the limit related to the practical quantitation limit (PQL).
- (v) Tests shall account for spatial variability, unless otherwise approved by the Department.
- (vi) Statistical testing shall be done individually for each parameter present in the fill.
- (vii) Where a fill has distinct physical, chemical or biological characteristics, or originates from different areas, the statistical testing shall be done separately.
- (viii) The following information shall be documented:
 - (A) A description of the original areas of the fill and physical, chemical and biological characteristics of the fill.
 - (B) A description of the underlying assumptions of the statistical method.
 - (C) Documentation showing that the sample data set meets the underlying assumptions of the statistical method.
 - (D) Documentation of input and output data for the statistical test, presented in tables or figures, or both, as appropriate.
 - (E) An interpretation and conclusion of the statistical test.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
ACENAPHTHENE	83-32-9	2700	2700
ACENAPHTHYLENE	208-96-8	2500	2500
ACEPHATE	30560-19-1	0.9	0.9
ACETALDEHYDE	75-07-0	0.23	0.23
ACETONE	67-64-1	41	370
ACETONITRILE	75-05-8	1.9	1.5
ACETOPHENONE	98-86-2	200	200
ACETYLAMINOFLUORENE, 2- (2AAF)	53-96-3	0.069	0.07
ACROLEIN	107-02-8	0.00062	0.00047
ACRYLAMIDE	79-06-1	0.00057	0.00066
ACRYLIC ACID	79-10-7	0.051	0.039
ACRYLONITRILE	107-13-1	0.0087	0.01
ALACHLOR	15972-60-8	0.077	0.077
ALDICARB	116-06-3	0.12	0.05
ALDRIN	309-00-2	0.10	0.47
ALLYL ALCOHOL	107-18-6	0.58	0.0075
AMINOBIPHENYL, 4	92-67-1	0.0012	0.0012
AMITROLE	61-82-5	0.029	0.029
AMMONIA	7664-41-7	360	360
AMMONIUM SULPHAMATE	7773-06-0	24	24
ANILINE	62-53-3	0.16	0.12
ANTHRACENE	120-12-7	350	350
ATRAZINE	1912-24-9	0.13	0.13
BAYGON (PROPOXUR)	114-26-1	0.057	0.057
BENOMYL	17804-35-2	880.00	880
BENTAZON	25057-89-0	16	2.9
BENZENE	71-43-2	0.13	0.13
BENZIDINE	92-87-5	0.078	0.018
BENZO[A]ANTHRACENE	56-55-3	25	5.7
BENZO[A]PYRENE	50-32-8	2.5	0.57
BENZO[B]FLUORANTHENE	205-99-2	25	5.7
BENZO[GHI]PERYLENE	191-24-2	180	180
BENZO[K]FLUORANTHENE	207-08-9	250	57
BENZOIC ACID	65-85-0	2900	2900
BENZOTRICHLORIDE	98-07-7	0.012	0.012

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
BENZYL ALCOHOL	100-51-6	400	650
BENZYL CHLORIDE	100-44-7	0.051	0.059
BHC, ALPHA	319-84-6	0.046	0.046
BHC, BETA	319-85-7	0.22	0.22
BHC, DELTA	319-86-8	11	**
BHC, GAMMA (LINDANE)	58-89-9	0.072	0.072
BIPHENYL, 1,1	92-52-4	790	790
BIS(2-CHLOROETHYL)ETHER	111-44-4	0.0039	0.0045
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	8.0	8
BIS(CHLOROMETHYL)ETHER	542-88-1	0.00001	0.000012
BIS[2-ETHYLHEXYL] PHTHALATE	117-81-7	130	130
BISPHENOL A	80-05-7	700	700
BROMACIL (BROMAX)	314-40-9	2	1.8
BROMOCHLOROMETHANE	74-97-5	1.6	1.6
BROMODICHLOROMETHANE	75-27-4	3.40	2.7
BROMOMETHANE	74-83-9	0.54	0.54
BROMOXYNIL	1689-84-5	63	63
BROMOXYNIL OCTANOATE	1689-99-2	360	360
BUTADIENE, 1,3	106-99-0	0.0062	0.0078
BUTYL ALCOHOL, N	71-36-3	12.00	44
BUTYLATE	2008-41-5	51.0	58
BUTYLBENZENE, N	104-51-8	950	950
BUTYLEBENZENE, SEC	135-98-8	350	350
BUTYLEBENZENE, TERT	98-06-6	270	270
BUTYLBENZYL PHTHALATE	85-68-7	10000	3000
CAPTAN	133-06-2	12	18
CARBARYL	63-25-2	41	220
CARBAZOLE	86-74-8	21	21
CARBOFURAN	1563-66-2	0.87	0.87
CARBON DISULFIDE	75-15-0	160	130
CARBON TETRACHLORIDE	56-23-5	0.26	0.26
CARBOXIN	5234-68-4	53	53
CHLORAMBEN	133-90-4	1.6	1.6
CHLORDANE	57-74-9	49	49
CHLORO-1, 1-DIFLUOROETHANE, 1	75-68-3	2300	1800

* Based on the current Chapter 250 standards.

**No chemical concentration limit exists in Chapter 250.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	0.065	0.049
CHLOROACETOPHENONE, 2	532-27-4	0.0093	0.033
CHLOROANILINE, P	106-47-8	19.00	0.42
CHLOROBENZENE	108-90-7	6.1	6.1
CHLOROBENZILATE	510-15-6	1.60	4
CHLOROBUTANE, 1	109-69-3	2300	230
CHLORODIBROMOMETHANE	124-48-1	3.20	2.5
CHLORODIFLUOROMETHANE	75-45-6	2.6	2800
CHLOROETHANE	75-00-3	5.00	5
CHLOROFORM	67-66-3	2.50	2
CHLORONAPHTHALENE, 2	91-58-7	6200	6200
CHLORO[DI]NITROBENZENE, [2-]P	100-00-5	4.9	4.9
CHLOROPHENOL, 2	95-57-8	4.40	4.4
CHLOROPRENE	126-99-8	0.45	0.35
CHLOROPROPANE, 2	75-29-6	21	16
CHLOROTHALONIL	1897-45-6	15	54
CHLOROTOLUENE, O	95-49-8	20	20
CHLORPYRIFOS	2921-88-2	23	2.3
CHLORSULFURON	64902-72-3	25	25
CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)	1861-32-1	650	110
CHRYSENE	218-01-9	230	230
CRESOL(S)	1319-77-3	3.1	3.1
CRESOL, O-(METHYLPHENOL, 2-)	95-48-7	64	30
CRESOL, M-(METHYLPHENOL, 3-)	108-39-4	36	36
CRESOL, P-(METHYLPHENOL, 4-)	106-44-5	4.2	4.2
CRESOL, P-CHLORO-M	59-50-7	37	37
CROTONALDEHYDE	4170-30-3	0.00099	0.0044
CROTONALDEHYDE, TRANS	123-73-9	0.00099	0.0044
CUMENE (ISOPROPYL BENZENE)*	98-82-8	780	600
CYCLOHEXANONE	108-94-1	1400	5000
CYFLUTHRIN	68359-37-5	33	33
CYROMAZINE	66215-27-8	84	84
DDD, 4,4'	72-54-8	6.8	31
DDE, 4,4'	72-55-9	41	41
DDT, 4,4'	50-29-3	53	53
DI(2-ETHYLHEXYL)ADIPATE	103-23-1	10000	10000
DIALLATE	2303-16-4	0.15	0.64

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
DIAMINOTOLUENE, 2,4	95-80-7	0.0042	0.0034
DIAZINON	333-41-5	0.082	<i>0.14</i>
DIBENZO[A,H]ANTHRACENE	53-70-3	2.50	0.57
DIBROMO-3-CHLOROPROPANE, 1,2	96-12-8	0.0092	0.0092
DIBROMOBENZENE, 1,4	106-37-6	150	150
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	0.0012	0.0012
DIBROMOMETHANE	74-95-3	3.7	<i>14</i>
DI-N-BUTYLPHTHALATE, N	84-74-2	1500	1500
DICHOLOR-2-B[Y]UTENE, 1,4	764-41-0	0.0009	0.00067
DICHLOROBENZENE, 1,2	95-50-1	59	59
DICHLOROBENZENE, 1,3	541-73-1	61	61
DICHLOROBENZENE, P	106-46-7	10	10
DICHLOROBENZIDINE, 3,3'	91-94-1	8.3	8.3
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	100	100
DICHLOROETHANE, 1,1	75-34-3	0.65	0.75
DICHLOROETHANE, 1,2	107-06-2	0.10	0.1
DICHLOROETHYLENE, 1,1	75-35-4	0.19	0.19
DICHLOROETHYLENE, CIS-1,2-*	156-59-2	1.6	1.6
DICHLOROETHYLENE, TRANS-1,2	156-60-5	2.3	2.3
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	0.076	0.076
DICHLOROPHENOL, 2,4	120-83-2	1	1
DICHLOROPHOXYACETIC ACID, 2,4- (2,4-D)	94-75-7	1.8	1.8
DICHLOROPROPANE, 1,2	78-87-5	0.11	0.11
DICHLOROPROPENE, 1,3	542-75-6	0.12	0.12
DICHLOROPROPIONIC ACID (DALAPON), 2,2	75-99-0	5.30	5.3
DICHLORVOS	62-73-7	0.012	<i>0.054</i>
DICYCLOPENTADIENE	77-73-6	0.12	3.2
DIELDRIN	60-57-1	0.11	0.11
DIETHYL PHTHALATE	84-66-2	160	<i>910</i>
DIFLUBENZIRON	35367-38-5	52	52
DIMETHOATE	60-51-5	0.28	0.28
DIMETHOXYBENZIDINE, 3,3	119-90-4	16	16
DIMETHYLAMINOAZOBENZENE, P	60-11-7	0.037	0.037
DIMETHYLANILINE, N,N	121-69-7	4.1	4.1
DIMETHYLBENZIDINE, 3,3	119-93-7	0.4	0.33
DIMETHYLPHENOL, 2,4	105-67-9	32	32

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
DINITROBENZENE, 1,3	99-65-0	0.049	0.049
DINITROPHENOL, 2,4	51-28-5	0.21	0.83
DINITROTOLUENE, 2,4	121-14-2	0.050	0.05
DINITROTOLUENE, 2, 6,- (2,6-DNT)	606-20-2	1.10	1.1
DINOSEB	88-85-7	0.290	0.29
DIOXANE, 1,4	123-91-1	0.073	0.084
DIPHENAMID	957-51-7	12	12
DIPHENYLAMINE	122-39-4	12	53
DIPHENYLHYDRAZINE, 1,2	122-66-7	0.15	0.15
DIQUAT	85-00-7	0.24	0.24
DISULFOTON	298-04-4	0.078	0.18
DIURON	330-54-1	0.86	6.3
ENDOSULFAN	115-29-7	30.00	110
ENDOSULFAN I (ALPHA)	959-98-8	110	110
ENDOSULFAN II (BETA)	33213-65-9	130	130
ENDOSULFAN SULFATE	1031-07-8	70	70
ENDOTHALL	145-73-3	4.1	4.1
ENDRIN	72-20-8	5.5	5.5
EPICHLOROHYDRIN	106-89-8	0.056	0.042
ETHEPHON	16672-87-0	2.1	2.1
ETHION	563-12-2	39	39
ETHOXYETHANOL, 2-(EGEE)	110-80-5	7.80	5.9
ETHYL ACETATE	141-78-6	220	850
ETHYL ACRYLATE	140-88-5	0.12	0.54
ETHYL BENZENE	100-41-4	46	46
ETHYL DIPROPYL THIOCARBAMATE, S-(EPTC)	759-94-4	65	65
ETHYL ETHER	60-29-7	53	210
ETHYLMETHACRYLATE	97-63-2	14	55
ETHYLENE GLYCOL	107-21-1	170	170
ETHYLENE THIOUREA (ETU)	96-45-7	0.034	0.032
ETHYL P-NITROPHENYL PHENYLPHOSPHOROTHIOATE	2104-64-5	0.12	0.12
FENAMIPHOS	22224-92-6	0.17	0.06
FENVALERATE (PYDRIN)	51630-58-1	94	94
FLUOMETURON (FLUORNETRON IN EPA FEB 96)	2164-17-2	2.5	2.5
FLUORANTHENE	206-44-0	3200	3200
FOSETYL-AL	039148-24-8	9700	9700

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
FLUORENE	86-73-7	3000	3000
FLUOROTROCHLOROMETHANE (FREON 11)	75-69-4	87	87
FONOFOS	944-22-9	2.9	2.9
FORMALDEHYDE	50-00-0	12	12
FORMIC ACID	64-18-6	210	0.071
FURAN	110-00-9	0.42	1.6
FURFURAL	98-01-1	1.4	1.4
GLYPHOSATE	1071-83-6	620	620
HEPTACHLOR	76-44-8	0.68	0.68
HEPTACHLOR EPOXIDE	1024-57-3	1.1	1.1
HEXACHLOROBENZENE	118-74-1	0.96	0.96
HEXACHLOROBUTADIENE	87-68-3	1.20	10
HEXACHLOROCYCLOPENTADIENE	77-47-4	91	91
HEXACHLOROETHANE	67-72-1	0.560	0.56
HEXANE	110-54-3	500	1400
HEXYTHIAZOX (SAVEY)	78587-05-0	820	820
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	0.000098	0.00011
HYDROQUINONE	123-31-9	20	0.16
INDENO[1,2,3-CD]PYRENE	193-39-5	25	5.7
IPRODIONE	36734-19-7	430	430
ISOBUTYL ALCOHOL	78-83-1	76	290
ISOPHORONE	78-59-1	1.90	1.9
KEPONE	143-50-0	0.56	0.56
MALATHION	121-75-5	34	170
MALEIC HYDRAZIDE	123-33-1	47	47
MANEB	12427-38-2	2	2
MERPHOS OXIDE	78-48-8	6.6	6.6
METHACRYLONITRILE	126-98-7	0.031	0.025
METHAMIDOPHOS	10265-92-6	0.022	0.022
METHANOL	67-56-1	58.00	99
METHOMYL	16752-77-5	3.20	3.2
METHOXYCHLOR	72-43-5	630	630
METHOXYETHANOL, 2	109-86-4	0.41	0.47
METHYL ACETATE	79-20-9	690	690
METHYL ACRYLATE	96-33-3	27	27
METHYL CHLORIDE	74-87-3	0.038	0.38

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	54	76
METHYL ISOBUTYL KETONE	108-10-1	2.90	45
METHYL METHACRYLATE	80-62-6	26.0	20
METHYL METHANESULFONATE	66-27-3	0.083	0.083
METHYL PARATHION	298-00-0	0.42	0.21
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	120	47
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.28	0.28
METHYLENE BIS(2-CHLOROANILINE), 4,4'	101-14-4	3.9	1.7
METHYLNAPHTHALENE, 2	91-57-6	2900	600
METHYLSTYRENE, ALPHA	98-83-9	120	460
NAPHTHALENE*	91-20-3	25	25
NAPHTHYLAMINE, 1	134-32-7	0.30	0.3
NAPHTHYLAMINE, 2	91-59-8	0.01	0.012
NAPROPAMIDE	15299-99-7	860	860
NITROANILINE, M	99-09-2	0.033	0.17
NITROANILINE, O	88-74-4	0.038	2
NITROANILINE, P	100-01-6	0.031	0.49
NITROBENZENE	98-95-3	0.79	3.2
NITROPHENOL, 2	88-75-5	5.90	5.9
NITROPHENOL, 4	100-02-7	4.1	4.1
NITROPROPANE, 2	79-46-9	0.000260	0.00029
NITROSODIETHYLAMINE, N	55-18-5	0.000018	0.0000079
NITROSODIMETHYLAMINE, N	62-75-9	0.000041	0.000019
NITROSO-DI-N-BUTYLAMINE, N	924-16-3	0.0033	0.015
NITROSODI-N-PROPYLAMINE, N	621-64-7	0.0013	0.0013
NITROSODIPHENYLAMINE, N	86-30-6	20.00	20
NITROSO-N-ETHYLUREA, N	759-73-9	0.000054	0.000092
OCTYL PHTHALATE, DI-N	117-84-0	4400	8800
OXAMYL (VYDATE)	23135-22-0	2.60	2.6
PARATHION	56-38-2	130	130
PCB-1016 (AROCLOR)	12674-11-2	15	15
PCB-1221 (AROCLOR)	11104-28-2	0.63	0.16
PCB-1232 (AROCLOR)	11141-16-5	0.50	0.13
PCB-1242 (AROCLOR)	53469-21-9	16	4
PCB-1248 (AROCLOR)	12672-29-6	9.90	9
PCB-1254 (AROCLOR)	11097-69-1	4.40	4.4

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
PCB-1260 (AROCLOR)	11096-82-5	30	9
PEBULATE	1114-71-2	300	300
PENTACHLOROBENZENE	608-93-5	180	180
PENTACHLORONITROBENZENE	82-68-8	5.00	5
PENTACHLOROPHENOL	87-86-5	5.00	5
PHENACETIN	62-44-2	12.00	12
PHENANTHRENE	85-01-8	10000	10000
PHENOL	108-95-2	66.00	33
PHENYLENEDIAMINE, M	108-45-2	3.10	3.1
PHENYLPHENOL, 2	90-43-7	490	500
PHORATE	298-02-2	0.41	1.6
PHTHALIC ANHYDRIDE	85-44-9	2300	2300
PICLORAM	1918-02-1	7.4	7.4
PRONAMIDE	23950-58-5	3.1	170
PROPANIL	709-98-8	9.2	9.2
PROPHAM	122-42-9	17	2.4
PROPYLBENZENE, N	103-65-1	290	290
PROPYLENE OXIDE	75-56-9	0.049	0.049
PYRENE	129-00-0	2200	2200
PYRIDINE	110-86-1	0.11	0.41
QUINOLINE	91-22-5	0.018	0.074
QUIZALOFOP (ASSURE)	76578-14-8	47	47
RONNEL	299-84-3	280	280
SIMAZINE	122-34-9	0.15	0.15
STRYCHNINE	57-24-9	0.89	0.89
STYRENE	100-42-5	24	24
TEBUTHIURON	34014-18-1	83	83
TERBACIL	5902-51-2	2.2	2.2
TERBUFOS	13071-79-9	0.12	0.055
TETRACHLOROBENZENE, 1,2,4,5	95-94-3	5.1	5.1
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8-(TCDD)	1746-01-6	0.00012	0.00014
TETRACHLOROETHANE, 1,1,1,2	630-20-6	18	18
TETRACHLOROETHANE, 1,1,2,2	79-34-5	0.0093	0.026
TETRACHLOROETHYLENE (PCE)	127-18-4	0.43	0.43
TETRACHLOROPHENOL, 2,3,4,6	58-90-2	450.00	1700
TETRAETHYL LEAD	78-00-2	0.0046	0.0046

* Based on the current Chapter 250 standards.

Table FP-1a
Chemical Concentration Limits For Organics

PARAMETER	Chemical Abstract Services Registry Number	Current Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
TETRAETHYLDITHIOPYROPHOSPHATE	3689-24-5	0.73	2.7
THIOFANOX	39196-18-4	0.12	0.12
THIRAM	137-26-8	47	47
TOLUENE	108-88-3	44	44
TOLUIDINE, M	108-44-1	0.13	0.17
TOLUIDINE, O	95-53-4	0.32	0.42
TOLUIDINE, P	106-49-0	0.32	0.32
TOXAPHENE	8001-35-2	1.20	1.2
TRIALLATE	2303-17-5	240	240
TRIBROMOMETHANE (BROMOFORM)	75-25-2	4.4	3.5
TRICHLORO- 1,2,2-TRIFLUOROETHANE, 1,1,2	76-13-1	26000	10000
TRICHLOROBENZENE, 1,2,4	120-82-1	27	27
TRICHLOROBENZENE, 1,3,5	108-70-3	31	31
TRICHLOROETHANE, 1,1,1	71-55-6	7.20	7.2
TRICHLOROETHANE, 1,1,2	79-00-5	0.15	0.15
TRICHLOROETHYLENE (TCE)	79-01-6	0.17	0.17
TRICHLOROPHENOL, 2,4,5	95-95-4	2300	2300
TRICHLOROPHENOL, 2,4,6	88-06-2	3.1	11
TRICHLOROPHOXYACETIC ACID, 2,4,5- (2,4,5-T)	93-76-5	1.50	1.5
TRICHLOROPHOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)(SILV	93-72-1	22	22
TRICHLOROPROPANE, 1,1,2	598-77-6	3.1	3.1
TRICHLOROPROPANE, 1,2,3	96-18-4	1.6	3.2
TRICHLOROPROPENE, 1,2,3	96-19-5	11	0.12
TRIFLURALIN	1582-09-8	0.96	1.9
TRIMEHTYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	9	8.4
TRIMETHYLBENZENE, 1,3,5	108-67-8	2.8	2.3
TRINITROTOLUENE, 2,4,6	118-96-7	0.023	0.023
VINYL ACETATE	108-05-4	6.50	5
VINYL BROMIDE (BROMOMETHANE)	593-60-2	0.068	0.073
VINYL CHLORIDE	75-01-4	0.03	0.027
WARFARIN	81-81-2	2.60	2.6
XYLENES (TOTAL)	1330-20-7	990	990
ZINEB	12122-67-7	29	29

* Based on the current Chapter 250 standards.

Table FP-1b
Chemical Concentration Limits For Metals and Inorganics

PARAMETER	Chemical Abstract Services Registry Number	Existing Clean Fill Total Analysis (mg/kg)	*Proposed Clean Fill Total Analysis (mg/kg)
ANTIMONY	7440-36-0	27	27
ARSENIC	7440-38-2	12	12
BARIUM AND COMPOUNDS	7440-39-3	8,200	8200
BERYLLIUM	7440-41-7	320	320
BORON AND COMPOUNDS	7440-42-8	6.7	1900
CADMIUM	7440-43-9	38	38
CHLORIDES		NA	NA
CHROMIUM III	16065-83-1	190,000	190000
CHROMIUM VI	18540-29-9	94	190
COBALT	7440-48-4	8.1	50
COPPER	7440-50-8	8,200	8100
CYANIDE FREE	57-12-5	200	200
LEAD	7439-92-1	450	450
MANGANESE	7439-96-5	31,000	2000
MERCURY	7439-97-6	10	10
NICKEL	7440-02-0	650	650
NITRATE NITROGEN		na	NA
NITRITE NITROGEN		na	NA
SELENIUM	7782-49-2	26	26
SILVER	7440-22-4	84	84
SULFATE		na	NA
THALLIUM	7440-28-0	14	14
TIN	7440-31-5	240	130000
VANADIUM	7440-62-2	1,500	1500
ZINC	7440-66-6	12,000	12000

* Based on the current Chapter 250 standards.

Management of Fill Form FP-001

FORM FP-001 - CERTIFICATION OF CLEAN FILL

Prior to completing this form and signing this certification, please review the entire Management of Fill policy (#258-2182-773), including the certification requirements. Please note that historic fill, as defined in the Management of Fill policy, may meet the definition of clean fill if the material is limited to uncontaminated soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such.

Fill containing a concentration of total PCBs greater than 2 ppm may be subject to regulation under the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 *et seq.*, and 40 C.F.R. Part 761, which is administered and implemented by the USEPA. For all such material, contact the PCB Coordinator for EPA Region 3 by email at R3_PCB_Coor@epa.gov to determine the allowable PCB level for your site and situation prior to transporting the material off the site of origin or accepting the material for use.

Instructions: Sections 1 and 2 of this form must be completed by the person making the determination of clean fill at the site of origin. Section 3 must be completed by the person using the material as clean fill. Both the person determining clean fill and the user of the clean fill are responsible for maintaining copies of this completed form on site for a period of five (5) years for Department inspection.

Section 1: Person Determining Clean Fill

Name (Print): _____ Title: _____ Date: _____

Company Name: _____

Street Address: _____ City: _____ State: _____ Zip Code: _____

Telephone Number: _____ E-mail Address: _____

Clean Fill Material originated on the following property:

Site Name: _____

Street Address: _____ City: _____ State: _____ Zip Code: _____

Section 2: Site Characterization

Check the following that applies:

A. IF the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.

Name of local, state, or federal agency: _____

Identification number assigned to the project: _____

Name of the local, state, or federal contact person: _____

Telephone Number: _____ E-mail Address: _____

Name of the Laboratory that conducted the analysis: _____

Laboratory Accreditation Number: _____

B. IF the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:

Copies of **ALL** lab analytical testing performed as part of environmental due diligence (see Management of Fill policy, #258-2182-773).

Name of the Laboratory that conducted the analysis: _____

Laboratory Accreditation Number: _____

C. IF the proposed material to be used as clean fill was subject to environmental due diligence procedures as defined in the Management of Fill policy other than those listed in A and B, describe those procedures.

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided in Sections 1 and 2 of this form is true and correct to the best of my knowledge, information and belief.

Signature: _____

Section 3: Person Receiving or Placing Clean Fill

Name and address of person completing this form:

Name (Print): _____ Date: _____

Mailing Address: _____ City: _____ State: _____ Zip Code: _____

Telephone Number: _____ E-mail Address: _____

Fill material that has been determined to be clean fill will be placed on the following property solely for property improvement or construction purposes:

Property Address: _____ City: _____ State: _____ Zip Code: _____

Current Owner of Property: _____

Telephone Number: _____ E-mail Address: _____

The quantity of clean fill to be placed on the property is:

<3,000 cubic yards 3,000 cubic yards to 20,000 cubic yards >20,000 cubic yards

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided is true and correct to the best of my knowledge, information and belief.

Signature: _____

* * * * *

Prior to placement of the clean fill, the owner of the property receiving fill material shall provide a copy of this completed form and attachments to the DEP Regional Office serving the county in which the receiving site is located. If a property receives fill from multiple sources, a separate Form FP-001 is required for each source.

Appendix J

Demolition and Construction Hazardous Waste Table

Demolition and Construction Hazardous Waste Table

(excerpt from EPA web page “Typical Wastes Generated by Industry Sectors” <https://www.epa.gov/hwgenerators/typical-wastes-generated-industry-sectors>)

Activity	Wastes Generated	Possible RCRA Waste Codes
Land-Clearing, Wrecking, and Demolition	Ignitable or toxic wreckage and debris, and lead pipe	D001 (ignitable wreckage and debris), D008 (lead pipe, toxic wreckage and lead-based paint debris), D009 (mercury-containing fluorescent lamps), D023-D026 (toxic wreckage and debris containing cresols)
Heavy Construction	Asphalt wastes, petroleum distillates, and used oil. (Asphalt is widely recycled.)	D001 (asphalt wastes, petroleum distillates, used oil sent for disposal), D004 (arsenic), D006-D008 (used oil sent for disposal containing cadmium, chromium, or lead), D018 (asphalt wastes containing benzene)
Carpentry and Floorwork	Acetone, adhesives, coatings, methylene chloride, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIK), mineral spirits, solvents, toluene, treated wood, trichloroethylene, and xylene	D001 (acetone, adhesives, coatings, methylene chloride, MEK, MIK, mineral spirits, solvents, trichloroethylene, toluene, xylene), D004 (treated wood), D023-D026, D037 (treated wood), D035 (MEK), D040 (trichloroethylene), F001 or F002 (trichloroethylene, methylene chloride), F003 (acetone, xylene, MIK), F005 (toluene, MEK), U002 (unused acetone), U159 (unused MEK), U161 (unused MIK), U239 (unused xylene), U220 (unused

Activity	Wastes Generated	Possible RCRA Waste Codes
		toluene), U080 (unused methylene chloride)
Paint Preparation and Painting	Acetone, chlorobenzene, glazes, methanol, MEK, methylene chloride, paint, petroleum distillates, pigments, solvents, stripping compounds, toluene, and wastewater	D001 (acetone, chlorobenzene, glazes, methanol, MEK, methylene chloride, paint, petroleum distillates, solvents, stripping compounds, toluene, wastewater), D007 (chromium pigments), D008 (lead pigments), D021 (chlorobenzene), D035 (MEK), F001 and F002 (chlorobenzene), F003 (acetone, methanol), F005 (MEK, toluene), U002 (unused acetone), U037 (unused chlorobenzene), U159 (unused MEK), U220 (unused toluene)
Specialty Contracting Activities	Acetone, adhesives, coatings, hexachloroethane, kerosene, MEK, MIK, pigments, solvents, toluene, wastewater, and xylene	D001 (acetone, adhesives, coatings, MEK, MIK, kerosene, solvents, toluene, wastewater, xylene), D007 (chromium pigments), D008 (lead pigments), D034 (hexachloroethane), D035 (MEK), F003 (acetone, MIK, xylene), F005 (toluene, MEK), U002 (unused acetone), U131 (unused hexachloroethane), U159 (unused MEK), U161 (unused MIK), U220 (unused toluene), U239 (unused xylene)

Appendix K

Project Delivery Spill Notification Form

SPILL NOTIFICATION FORM

In the event of a discharge to the environment, the following information will be needed if reporting to PADEP and EPA as appropriate.

PENNDOT – PROJECT DELIVERY JOB SITE SPILL REPORT			
Discharge/Discovery Date		Time	
Project Site Name:			
Project Site Location (Address/Lat- Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	National Response Center 800-424-8802 Name: Time:		
	State Agency (Specify) Name: Time		
	Facility personnel (Specify) Name: Time		
	Cleanup contractor (Specify) Name: Time		
	Other (Specify) Name: Time		

Appendix L

EPA Guidance - Concrete Washout

Concrete Washout



Minimum Measure

Construction Site Stormwater Runoff Control

Subcategory

Good Housekeeping/Materials Management

Description of Concrete Washout at Construction Sites

Concrete and its ingredients

Concrete is a mixture of cement, water, and aggregate material. Portland cement is made by heating a mixture of limestone and clay containing oxides of calcium, aluminum, silicon and other metals in a kiln and then pulverizing the resulting clinker. The fine aggregate particles are usually sand. Coarse aggregate is generally gravel or crushed stone. When cement is mixed with water, a chemical reaction called hydration occurs, which produces glue that binds the aggregates together to make concrete.

Concrete washout

After concrete is poured at a construction site, the chutes of ready mixed concrete trucks and hoppers of concrete pump trucks must be washed out to remove the remaining concrete before it hardens. Equipment such as wheelbarrows and hand tools also need to be washed down. At the end of each work day, the drums of concrete trucks must be washed out. This is customarily done at the ready mixed batch plants, which are usually off-site facilities, however large or rural construction projects may have on-site batch plants. Cementitious (having the properties of cement) washwater and solids also come from using such construction materials as mortar, plaster, stucco, and grout.

Environmental and Human Health Impacts

Concrete washout water (or washwater) is a slurry containing toxic metals. It's also caustic and corrosive, having a pH near 12. In comparison, Drano liquid drain cleaner has a pH of 13.5. Caustic washwater can harm fish gills and eyes and interfere with reproduction. The safe pH ranges for aquatic life habitats are 6.5 – 9 for freshwater and 6.5 – 8.5 for saltwater.

Construction workers should handle wet concrete and washout water with care because it may cause skin irritation and eye damage. If the washwater is dumped on the ground (Fig. 1), it can run off the construction site to adjoining roads and enter roadside storm drains, which discharge to surface waters such as rivers, lakes, or estuaries. The red arrow in Figure 2 points to a ready mixed truck chute that's being washed out into a roll-off bin, which isn't watertight. Leaking washwater, shown in the foreground, will likely follow similar



Figure 1. Chute washwater being dumped on the ground



Figure 2. Chute washwater leaking from a roll-off bin being used as a washout container

paths to nearby surface waters. Rainfall may cause concrete washout containers that are uncovered to overflow and also transport the washwater to surface waters. Rainwater polluted with concrete washwater can percolate down through the soil and alter the soil chemistry, inhibit plant growth, and contaminate the groundwater. Its high pH can increase the toxicity of other substances in the surface waters and soils. Figures 1 and 2 illustrate the need for better washout management practices.

Best Management Practice Objectives

The best management practice objectives for concrete washout are to (a) collect and retain all the concrete washout water and solids in leak proof containers, so that this caustic material does not reach the soil surface and then migrate to surface waters or into the ground water, and (b) recycle 100 percent of the collected concrete washout water and solids. Another

Stormwater Best Management Practice: Concrete Washout

objective is to support the diversion of recyclable materials from landfills. Table 1 shows how concrete washout materials can be recycled and reused.

Table 1 – Recycling concrete washout materials

Uses of Recycled Materials	Concrete Washout Materials					
	Washwater	Cement fines ^a	Fine aggregate	Coarse aggregate	Hardened concrete	Unused wet concrete
Reused to washout additional mixer truck chutes or drums	x					
Reused as a ready mixed concrete ingredient	x	x ^b	x	x		
Reused as an ingredient of precast concrete products, e.g., highway barriers, retaining wall blocks, riprap	x	x	x	x		x
Reused as crushed concrete products, e.g., road base or fill		x	x	x	x	
Reused to pave the yards of ready mixed concrete plants						x
Returned back to a surface water, e.g., river, lake, or estuary	x ^c					

a. Fine particles of cementitious material (e.g., Portland cement, slag cement, fly ash, silica fume)

b. Recyclable, if allowed by the concrete quality specifications

c. Treated to reduce the pH and remove metals, so it can be delivered to a municipal wastewater treatment plant, where it is treated further and then returned to a natural surface water

Washwater recycling, treatment, disposal

Washwater from concrete truck chutes, hand mixers, or other equipment can be passed through a system of weirs or filters to remove solids and then be reused to wash down more chutes and equipment at the construction site or as an ingredient for making additional concrete. A three chamber washout filter is shown in Figure 3. The first stage collects the coarse aggregate. The middle stage filters out the small grit and sand. The third stage has an array of tablets that filter out fines and reduces the pH. The filtered washwater is then discharged through a filter sock. An alternative is to pump the washout water out of the washout container (Fig 4) and treat the washwater off site to remove metals and reduce its pH, so it can be delivered to a publicly owned treatment works (POTW), also known as a municipal wastewater treatment plant, which provides additional treatment allowing the washwater to be discharged to a surface water. The POTW should be



Figure 3. Concrete washout filter

contacted to inquire about any pretreatment requirements, i.e., the National Pretreatment Standards for Prohibited Dischargers (40CFR 403.5) before discharging the washwater to the POTW. The washwater can also be retained in the washout container and allowed to evaporate, leaving only the hardened cementitious solids to be recycled.



Figure 4. Vacuuming washwater out of a washout container for treatment and reuse

Solids recycling

The coarse aggregate materials that are washed off concrete truck chutes into a washout container can be either separated by a screen and placed in aggregate bins to be reused at the construction site or returned to the ready mixed plant and washed into a reclaimer (Fig. 5). When washed out into a reclaimer, the fine and coarse aggregates are separated out and placed in different piles or bins to be reused in making fresh concrete. Reclaimers with settling tanks separate cement fines from the washwater, and these fines can also be used in new concrete unless prohibited by the user's concrete quality specifications.



Figure 5. Ready mixed truck washing out into a reclaimer

Hardened concrete recycling

When the washwater in a construction site concrete washout container has been removed or allowed to evaporate, the hardened concrete that remains can be crushed (Fig. 6) and reused as a construction material. It makes an excellent aggregate for road base and can be used as fill at the

construction site or delivered to a recycler. Concrete recyclers can be found at municipal solid waste disposal facilities, private recycling plants, or large construction sites.



Figure 6. Crushed concrete stockpile and crusher

Stormwater Best Management Practice: Concrete Washout

Wet concrete recycling

Builders often order a little more ready mixed concrete than they actually need, so it is common for concrete trucks to have wet concrete remaining in their drum after a delivery. This unused concrete can be returned to the ready mixed plant and either (1) used to pour precast concrete products (e.g., highway barriers, retaining wall blocks, riprap), (2) used to pave the ready mixed plant's yard, (3) washed into a reclaimer, or (4) dumped on an impervious surface and allowed to harden, so it can be crushed and recycled as aggregate. Unused wet concrete should not be dumped on bare ground to harden at construction sites because this can contribute to ground water and surface water contamination.

Washout Containers

Different types of washout containers are available for collecting, retaining, and recycling the washwater and solids from washing down mixed truck chutes and pump truck hoppers at construction sites.

Chute washout box

A chute washout box is mounted on the back of the ready mixed truck. If the truck has three chutes, the following procedure is used to perform the washout from the top down: (1) after the pour is completed, the driver attaches the extension chute to the washout box, (2) the driver then rotates the main chute over the extension chute (Fig. 7) and washes down the hopper first then the main chute, (3) finally the driver washes down the flop down chute and last the extension chute hanging on the box. All washwater and solids are captured in the box.



Figure 7. Chute washout box

After the wash down, washwater and solids are returned to the ready mixed plant for recycling. A filter basket near the top of the washout box separates out the coarse aggregates so they can be placed in a bin for reuse either at the construction site or back at the cement plant.

Chute washout bucket and pump

After delivering ready mixed concrete and scraping the last of the customer's concrete down the chute, the driver hangs a washout bucket shown in Figure 8 (see red arrow) on the end of the truck's chute and secures the hose to insure no leaks. The

driver then washes down the chute into the bucket to remove any cementitious material before it hardens. After washing out the chute, the driver pumps (yellow arrow points to the pump) the washwater, sand, and other fine solids from the bucket up into the truck's drum to be returned to the ready mixed plant, where it can be washed into a reclaimer. A removable screen at the bottom of the washout bucket prevents coarse aggregate from entering the pump. This coarse aggregate can also be returned to the plant and added to the coarse aggregate pile to be reused. All the materials are recycled.



Figure 8. Chute washout bucket and pump

Hay bale and plastic washout pit

A washout pit made with hay bales and a plastic lining is shown in Figure 9. Such pits can be dug into the ground or built above grade. The plastic lining should be free of tears or holes that would allow the washwater to escape (Fig. 10). After the pit is used to wash down the chutes of multiple ready mixed trucks and the washwater has evaporated or has been vacuumed off, the remaining hardened solids can be broken up and removed from the pit. This process may damage the hay bales and plastic lining. If damage occurs, the pit will need to be repaired and relined with new plastic. When the hardened solids are removed, they may be bound up with the plastic lining and have to be sent to a landfill, rather than recycled. Recyclers usually accept only unmixed material. If the pit is going to be emptied and repaired more than a few times, the hay bales and plastic will be generating additional solid waste. Ready mixed concrete



Figure 9. Hay bale and plastic washout pit



Figure 10. Leaking washout pit that has not been well maintained

Stormwater Best Management Practice: Concrete Washout

trucks can use hay bale washout pits, but concrete pump trucks have a low hanging hopper in the back that may prevent their being washed out into bale-lined pits.

Vinyl washout container



Figure 11. Vinyl washout pit with filter bag

The vinyl washout container (Fig. 11) is portable, reusable, and easier to install than a hay bale washout pit. The biodegradable filter bag (Fig. 12) assists in extracting the concrete solids and prolongs the life of the vinyl container. When the bag is lifted, the water is filtered out and the remaining concrete solids and the bag can be disposed of together in a landfill, or the hardened concrete can be delivered to a recycler. After the solids have been removed several times and the container is full of washwater, the washwater can be allowed to evaporate, so the container can be reused. The washwater can be removed more quickly by placing another filter bag in the container and spreading water gelling granules evenly across the water. In about five minutes, the water in the filter bag will turn into a gel that can be removed with the bag. Then the gel and filter bag can be disposed to together.



Figure 12. Extracting the concrete solids or gelled washwater

Metal washout container

The metal roll-off bin (Fig. 13) is designed to securely contain concrete washwater and solids and is portable and reusable. It also has a ramp that allows concrete pump trucks to wash out their hoppers (Fig. 14). Roll-off providers offer recycling services, such as, picking up the roll-off bins after the washwater has evaporated and the solids have hardened, replacing them with empty washout bins, and delivering the hardened concrete to a recycler (Fig. 15), rather than a landfill. Some providers will vacuum off the washwater, treat it to remove metals and reduce the pH, deliver it to a wastewater treatment plant for additional treatment and



Figure 13. Mixer truck being washed out into a roll-off bin

subsequent discharge to a surface water. Everything is recycled or treated sufficiently to be returned to a natural surface water.



Figure 14. Pump truck using the ramp to wash out into a roll-off bin



Figure 15. Delivering hardened Concrete to a recycler

Another metal, portable, washout container, which has a rain cover to prevent overflowing, is shown in Figure 16. It is accompanied by an onsite washwater treatment unit, which reduces the pH and uses a forced weir tank system to remove the coarse aggregate, fine aggregate, and cement fines. The washwater can then be reused at the construction site to wash out other mixer truck chutes and equipment. The solids are allowed to harden together and can be taken to a concrete recycler (Fig. 17) to be crushed and used as road base or aggregate for making precast products, such as retaining wall blocks. All materials are recycled.



Figure 16. Washout container with a rain cover and onsite washwater treatment



Figure 17. Delivering hardened concrete to a recycler

Siting Washout Facilities

Concrete washout facilities, such as washout pits and vinyl or metal washout containers, should be placed in locations that provide convenient access to concrete trucks, preferably near the area where concrete is being poured. However they

should not be placed within 50 feet of storm drains, open ditches, or waterbodies. Appropriate gravel or rock should cover approaches to concrete washout facilities when they are located on undeveloped property. On large sites with extensive concrete work, washouts should be placed at multiple locations for ease of use by ready mixed truck drivers. If the washout facility is not within view from the pour location, signage will be needed to direct the truck drivers.

Operating and Inspecting Washout Facilities

Concrete washout facilities should be inspected daily and after heavy rains to check for leaks, identify any plastic linings and sidewalls have been damaged by construction activities, and determine whether they have been filled to over 75 percent capacity. When the washout container is filled to over 75 percent of its capacity, the washwater should be vacuumed off or allowed to evaporate to avoid overflows. Then when the remaining cementitious solids have hardened, they should be removed and recycled. Damages to the container should be repaired promptly. Before heavy rains, the washout container's liquid level should be lowered or the container should be covered to avoid an overflow during the rain storm.

Educating Concrete Subcontractors

The construction site superintendent should make ready mixed truck drivers aware of washout facility locations and be watchful for improper dumping of cementitious material. In addition, concrete washout requirements should be included in contracts with concrete delivery companies.

Reference

NRMCA 2009. [Environmental Management in the Ready Mixed Concrete Industry, 2PEMRM, 1st edition](#). By Gary M. Mullins. Silver Springs, MD: National Ready Mixed Concrete Association.

Websites and Videos

Construction Materials Recycling Association
www.concreterecycling.org

National Ready Mixed Concrete Association
www.nrmca.org

National Ready Mixed Concrete Research and Education Foundation
www.rmc-foundation.org

Additional information and videos on concrete washout containers and systems can be found by a web search for "concrete washout."

Photograph Credits

Figures 1, 2. *Mark Jenkins, Concrete Washout Systems, Inc.*

Figure 3. *Mark Shaw, Ultra Tech International, Inc.*

Figure 4. *Mark Jenkins, Concrete Washout Systems, Inc.*

Figure 5. *Christopher Crouch, CCI Consulting*

Figure 6. *William Turley, Construction Materials Recycling Association*

Figure 7. *Brad Burke, Innovative Concrete Solutions, LLC*

Figure 8. *Ron Lankester, Enviroguard*

Figures 9, 10. *Mark Jenkins, Concrete Washout Systems, Inc.*

Figures 11, 12. *Tom Card, RTC Supply*

Figures 13, 14, 15. *Mark Jenkins, Concrete Washout Systems, Inc.*

Figures 16, 17. *Rick Abney Sr, Waste Crete Systems, LLP*

Disclaimer

Please note that EPA has provided external links because they provide additional information that may be useful or interesting. EPA cannot attest to the accuracy of non-EPA information provided by these third-party websites and does not endorse any non-government organizations or their products or services.

Appendix M

Department of General Services (DGS)
Management Directive 205.22

MANAGEMENT DIRECTIVE

Commonwealth of Pennsylvania
Governor's Office

Subject: Recycling, Waste Reduction and Procurement of Environmentally Preferable Products	Number: 205.22 Amended
Date: September 19, 2014	By Direction of:  Sheri Phillips, Secretary of General Services  E. Christopher Abruzzo, Secretary of Environmental Protection
Contact Agency: Department of General Services, Commonwealth Agency Recycling Office, Telephone: 717.772.2300 Department of Environmental Protection, Bureau of Waste Management, Division of Waste Minimization and Planning, Telephone: 717.787.7382	

This directive establishes policy, responsibilities and procedures for commonwealth agency recycling, waste reduction and procurement of environmentally preferable products. Marginal dots are excluded due to major changes.

- PURPOSE.** To establish policies, responsibilities and procedures to ensure that each agency incorporates recycling and waste prevention in the agency's daily operations and works to encourage the agency's procurement of environmentally preferable products.
- SCOPE.** This directive applies to all departments, boards, commissions, councils (hereafter referred to as "agencies") under the Governor's jurisdiction including commonwealth-owned universities, the State Public School Building Authority and the State Highway and Bridge Authority. Legislative, judicial and other independent agencies are also strongly encouraged to comply with this directive for their facilities.
- OBJECTIVES.** To invigorate agency recycling programs; to ensure that agencies are meeting or exceeding the requirements of *Act 101 of 1988, the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. § 4000.101 et seq.* (Act 101) (relating to agency recycling and procurement activities) and to direct commonwealth procurement toward increasing the demand for environmentally preferable products.

4. DEFINITIONS.

- a. Bio-Based Product.** A commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal and marine) or forestry materials.
- b. Commonwealth Agency.** All departments, boards, commissions and agencies, commonwealth-owned universities, the State Public School Building Authority and the State Highway and Bridge Authority.
- c. Department of General Services (DGS), Commonwealth Agency Recycling Office (CARO).** The Office responsible for the implementation, planning and coordination of the commonwealth's enterprise-wide Agency Recycling Program.
- d. Environmentally Preferable.**
 - (1)** Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. The product or service comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal.
 - (2)** Products with recycled content.
- e. Post-Consumer Material.** Any product generated by a business or consumer that has served its intended end use, and that has been separated or diverted from solid waste for the purposes of collection, recycling and disposition.
- f. Procurement Documents.** Invitations to bid, requests for proposals, requests for quotations, contracts and similar documents.
- g. Recycled Content.** The portion of goods, supplies, equipment, materials or printing containing post-consumer materials.
- h. Recycling.** The series of activities including collection, separation and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.
- i. "Waste Prevention" or "Waste Reduction".**
 - (1)** Change in the design, manufacturing, purchase or use of materials or products (including packaging) that reduces the weight or volume or the toxicity of the materials or products before disposal.
 - (2)** Decreasing the amount of waste being generated through waste prevention, recycling, or by purchasing recycled and environmentally preferable products.
 - (3)** Reuse of products or materials.

5. POLICY.

- a. Pursuant to *Act 101* each agency is required to: establish and implement a source-separation and collection program for recyclable materials produced as a result of agency operations; establish and implement a waste reduction program for materials used in the course of agency operations to the maximum extent practicable and feasible; give due consideration and preference to the use of compost materials in all land maintenance activities which are to be paid with public funds; review and revise procurement procedures and specifications which will to the maximum extent economically feasible encourage the use of goods, supplies, equipment, materials and printing that may be recycled or reused.
- b. Pursuant to *Act 57 of 1998*, 62 Pa.C.S. §§ 101-4604, the *Commonwealth Procurement Code*, DGS establishes procurement policy governing the procurement, management, control and disposal of supplies, services and construction for executive and independent agencies.

6. RESPONSIBILITIES.

a. Agencies shall:

- (1) Participate in the DGS Agency Recycling Program at all agency locations.
- (2) Appoint a Recycling and Waste Reduction Coordinator to be responsible for the implementation of this directive. This person shall act as a liaison between the agency, the Department of Environmental Protection (DEP), and DGS. The head of each agency shall designate the coordinator and notify CARO of their designee.
- (3) Reduce waste disposal throughout all agency operations and programs.
- (4) Give due consideration and preference to the use of compost materials in all publicly-funded land maintenance activities.
- (5) Procure environmentally preferable products whenever practical and economically feasible, including in the construction or renovation of facilities owned by the agency.
- (6) Develop specifications for construction or renovations of leased facilities to ensure Lessors use environmentally preferable products whenever practical and economically feasible.
- (7) Work with CARO to establish the precise nature of its waste stream at each agency location and the best means by which to recycle materials or reduce wastes created.
- (8) Within one year after a product is placed on the USDA Bio-Based Products List, and each year thereafter, estimate agency purchases of products on the list and report agency purchases of such products to CARO.

- (9) Prepare a report to be sent electronically, by October 1 of each year, to CARO on the progress from the prior year in the areas of recycling and waste reduction and provide a report on the status of recycling at all agency locations, including a list of materials being recycled, the approximate amount being recycled and the name of the recycling vendor servicing the location for office paper, cardboard and bottles and cans.
- (10) Ensure that their government facilities and activities comply with all applicable federal, state and local environmental laws and regulations.
- (11) Provide sufficient funds to develop and implement its recycling, waste reduction, and environmentally preferable purchasing programs within their respective agencies.

b. **DEP** shall:

- (1) Provide technical assistance to CARO.
- (2) Assist CARO in coordinating recycling and waste reduction efforts among agencies, and in providing information about potential recycling markets to CARO and agencies.

c. **DGS:**

(1) **CARO** shall:

- (a) Develop and publish guidelines for agencies for the development of source separation and collection programs, and waste reduction programs designed to achieve the maximum feasible reduction of waste generated as a result of agency operations. The guidelines for source separation and collection from agencies shall include, at a minimum, the separation and collection of white paper, mixed paper/cardboard, aluminum, plastic, and glass. The published guidelines shall include procedures for collecting and storing recyclable materials; bins or containers for sorting materials; and contractual or other arrangements with buyers.
- (b) Establish minimum percentages of recycled content for the purchase of goods, supplies, equipment, materials, and printing that is not less than that specified in guidelines adopted by the Environmental Protection Agency (EPA). DGS may use an independent third-party verified life cycle assessment, conforming to the ISO 14040 series of standards to establish higher levels. DGS may also identify other goods, supplies, equipment, materials, and printing not included in the EPA guidelines, that meet the minimum percentage levels for total recycled contents as established by DGS.
- (c) Prepare and submit to DGS, Bureau of Procurement for publication a list of environmentally preferable products, as designated by quantity of recycled content meeting either the EPA guidelines or DGS purchasing guidelines, whichever reflects the higher recycled content.

- (d) Inform agencies of market opportunities and marketing procedures for recyclable materials collected from agency operations.
- (e) Identify and encourage opportunities for cooperation among agencies in collection and marketing of recyclable materials. This shall include the preparation and establishment of statewide contracts for recycling markets, and the provision of information on market opportunities for recyclable materials to agencies.
- (f) Collect reports and other information provided by agencies and report to DEP on the progress of agencies in meeting the goals of this directive. CARO shall prepare and submit quarterly reports to DEP concerning the recycling, waste reduction and environmentally preferable purchasing activities of agencies.
- (g) Coordinate appropriate government-wide education and training programs for agencies.
- (h) Take all actions necessary to ensure that the agencies comply with the requirements of this directive.
- (i) Maintain the on-line comprehensive list of agency locations for the purpose of registering the materials and amounts recycled at the locations, the names of recycling vendors servicing the locations and the contact information for the agency recycling contact at the location.
- (j) Hold annual meetings with all agency recycling Coordinators for program updates, accomplishments and reminders.
- (k) Work with the Bureau of Procurement to prepare and establish contracts for the disposition of used white paper, mixed paper/cardboard, aluminum, plastic, and glass, and other recyclable materials.

(2) Bureau of Procurement shall:

- (a) Provide CARO with an annual report concerning actions taken by the bureau to implement the recycled content bidding preference. The report shall include information relating to the quantity and dollar amount of items with recycled content purchased through the bureau throughout the year.
- (b) Publish in the DGS Procurement Handbook procedures in regard to the procurement of environmentally preferable products.
- (c) Publish in the DGS Procurement Handbook items to be procured as a product containing recycled content.
- (d) Publish in the DGS Procurement Handbook the minimum percentages of recycled content that are not less than that specified in guidelines adopted by EPA.

(3) Bureau of Real Estate shall ensure all commonwealth leases for the use of office space and warehouse space comply with the requirements of *Act 101*.

7. PROCEDURES.

- a. Recycling.** In coordination with DGS, each agency shall ensure that there is a program in place at all central and satellite offices to promote cost-effective recycling of reusable materials in all of its facilities. Recycling programs implemented pursuant to this directive must be compatible with applicable state and local recycling requirements. Agencies are required to have a source separation and collection program for recyclable materials produced as a result of agency operations, including, at a minimum, white paper, mixed paper/cardboard, aluminum, plastic and glass. Agencies should incorporate into their recycling programs efforts to recycle, reuse or refurbish pallets and to collect toner cartridges for remanufacturing. Agencies should also include programs to reuse or recycle, as appropriate, batteries, scrap metal, computer equipment, motor oil, motor coolant, tires and fluorescent lamps and ballasts.
- b. Waste Reduction.** Each agency shall have a waste reduction program designed and implemented to achieve maximum feasible reduction of waste generated as a result of agency operations. An agency waste reduction program may, for example, include: contracting for services that provide for the take-back of materials at the end of their useful life, i.e. computers and carpeting; utilizing networking options for computer printers in place of purchasing individual printers; and reducing paper use through utilization of electronic copies and double-sided copying. Agencies should also consider reusable packaging and packaging manufactured from recycled content.
- c. Compost and Mulch Use.** Agencies responsible for the maintenance of public lands in the commonwealth, shall give consideration and preference to the use of compost and mulch materials in all publicly funded land maintenance conducted through staff or through contractual agreements.
- d. Procurement of Environmentally Preferable Products.** Solicitations and contracts for the procurement of supplies, services and construction must contain requirements for the procurement of products containing recycled content. Agencies should consult Part I, Chapter 22 of *Manual 215.3, Procurement Handbook* for specific instructions.
- e. Construction Contracts.** All agency contracts for construction, reconstruction, alteration or repair shall include, when appropriate, the requirement that any products that are provided to the agency as a part of the performance of the contract must meet the minimum percentage levels for total recycled content and recycled content as specified in the EPA guidelines or in DGS purchasing guidelines, whichever reflects the higher level of recycled content. For buildings seeking certification under the U.S. Green Building Council's LEED rating system, agencies should seek the resource reuse and recycled content credits.

f. Commonwealth-Leased Properties. When appropriate, each agency shall ensure that specifications for the renovations to facilities to be leased to agencies require that products used in the renovation of the facility, which have been designated by quantity of recycled content as specified in EPA guidelines or DGS purchasing guidelines, must meet the minimum percentage levels for total recycled content as specified in the EPA guidelines or in DGS purchasing guidelines, whichever reflects the higher level of recycled content. For buildings seeking certification under the U.S. Green Building Council's LEED rating system, agencies should seek the resource reuse and recycled content credits instead.

This directive replaces, in its entirety, *Management Directive 205.22*, dated August 29, 2007.

Appendix N

PennDOT Waster Management Forms and Specific Guidance

Street Sweeping and Antiskid

Bureau of Waste Management

Disposal/Reuse of Street-Sweeping Debris and Antiskid

Street sweepings consist of antiskid (cinders, coal (bottom) ash, rock, and sand), salt, leaves, plastic, broken glass, small pieces of metal, litter and debris. Sweepings are removed from streets, parking lots and sidewalks to improve the appearance and safety of public roadways and prevent pollution of local waterways.

Municipalities are able to reuse antiskid provided that it is screened to separate all non-reusable debris, such as silt, trash, litter, leaves, etc., from the reusable antiskid material and visually checked for contaminants, staining or odors. If the visual examination shows no staining, odors or other evidence of contaminants, the antiskid may be managed as clean fill and used in an unrestricted manner, including the following:

- Reuse as antiskid.
- Remixed with new salt mixture for winter application to roads.
- As the sub-grade beneath a paved municipal road or parking lot.
- For filling potholes.
- As shoulder repair material along roads within the municipally or privately owned public right-of-way.
- Other fill.

If the visual examination shows staining, odors or other evidence of contaminants, the antiskid material must be tested to determine if it qualifies as clean fill. Testing must be performed in accordance with Appendix A of the [Management of Fill policy \(Document No. 258-2182-773\)](#). If testing reveals that the antiskid material contains regulated substances at concentrations that exceed the limits in Tables FP-1a and 1b, the material may be managed as regulated fill, provided the person proposing to use the material obtains authorization under Waste Management General Permit WMGR096. Otherwise, the material must be disposed of at a permitted landfill.

All non-reusable debris that has been removed from the antiskid, as well as catch-basin material, must be disposed of at a landfill. For additional information, please contact the Bureau of Waste Management, Division of Municipal and Residual Waste, at 717-787-7381.

Wash Bay Grit Trap Waste

DATE: December 3, 2015

SUBJECT: Wash Bay Grit Trap Waste

TO: District Executives

FROM: Richard N. Roman, P.E., Director *Richard N. Roman* /s/
Bureau of Maintenance and Operations

As part of the Department's ongoing commitment to the environment, maintenance facility environmental compliance audits have been conducted in a number of Districts. One common issue that has surfaced is the management of wash bay grit trap waste.

Characterization data was collected from a number of Districts and by the SEMP Section. These results are presented in attached Table 1.

From this information and our own observations, we are able to conclude the following:

- Wash bay grit trap waste is typically not a hazardous waste.
- Wash bay grit trap waste typically has low levels of man-made contaminants, and as a default, shall be managed as a Residual Waste.
- There may be opportunities for individual facilities to manage wash bay grit trap waste as fill (Regulated or Clean). It is reasonable to assume that the subject waste has been impacted by a release or co-mingled with other waste. Therefore, to manage grit trap waste as fill, it must be free from other trash and debris, and its regulatory status (i.e., a Fill Determination) must be determined and documented in accordance with the provisions provided in Appendix D of PennDOT Publication 281, *Waste Site Evaluation Procedures Handbook, Volume 1*.

While it may appear preferable to manage grit trap waste as fill, please be advised that there are additional efforts and associated costs when utilizing the fill management approach. See attached Figures 1 and 2 for that process. To manage grit trap waste as fill, the District at a minimum shall collect two (2) years of quarterly samples of the grit trap waste to account for seasonal variations. In addition, each year thereafter, the grit trap waste shall be sampled in rotating seasons (summer, fall, winter, spring) so that each season is accounted for over a four (4) year period to verify characterization. As an alternative, each application of grit trap waste managed as fill shall be characterized. Documentation for the management fill is prescribed in PennDOT Publication 281. Due to these additional efforts, the Districts are advised to fully evaluate and document the costs/benefits before utilizing either fill management option.

When managing grit trap waste as a waste, chemical analysis requirements will be determined by the receiving facility (usually communicated through the vendor). Depending on the receiving facility's operating permit and regulatory climate, waste characterization may be required more or less often. The Districts are advised to ensure all characterization testing is the responsibility of the vendor by specifying this requirement in any applicable contract or purchase order.

493-15-05
December 3, 2015
Page 2

If no other information relative to a facility's wash bay trap waste is available, the information contained in this Strike-off Letter (SOL) and attached Table 1 may be used as justification for managing wash bay trap waste as Residual Waste.

Please note in all circumstances, PennDOT facilities always have the option of utilizing the Statewide Hazardous and Residual Waste ITQ Contract managed by the Department of General Services (DGS) to dispose of facility generated wastes.

This policy will be incorporated into the Department's Waste Management Manual (Pub. 611) when next updated.

Should you have any questions, please contact David Condo, PhD., Environmental Chemist 2, at 717.772.0831.

Attachments

4930/DPC/hmq

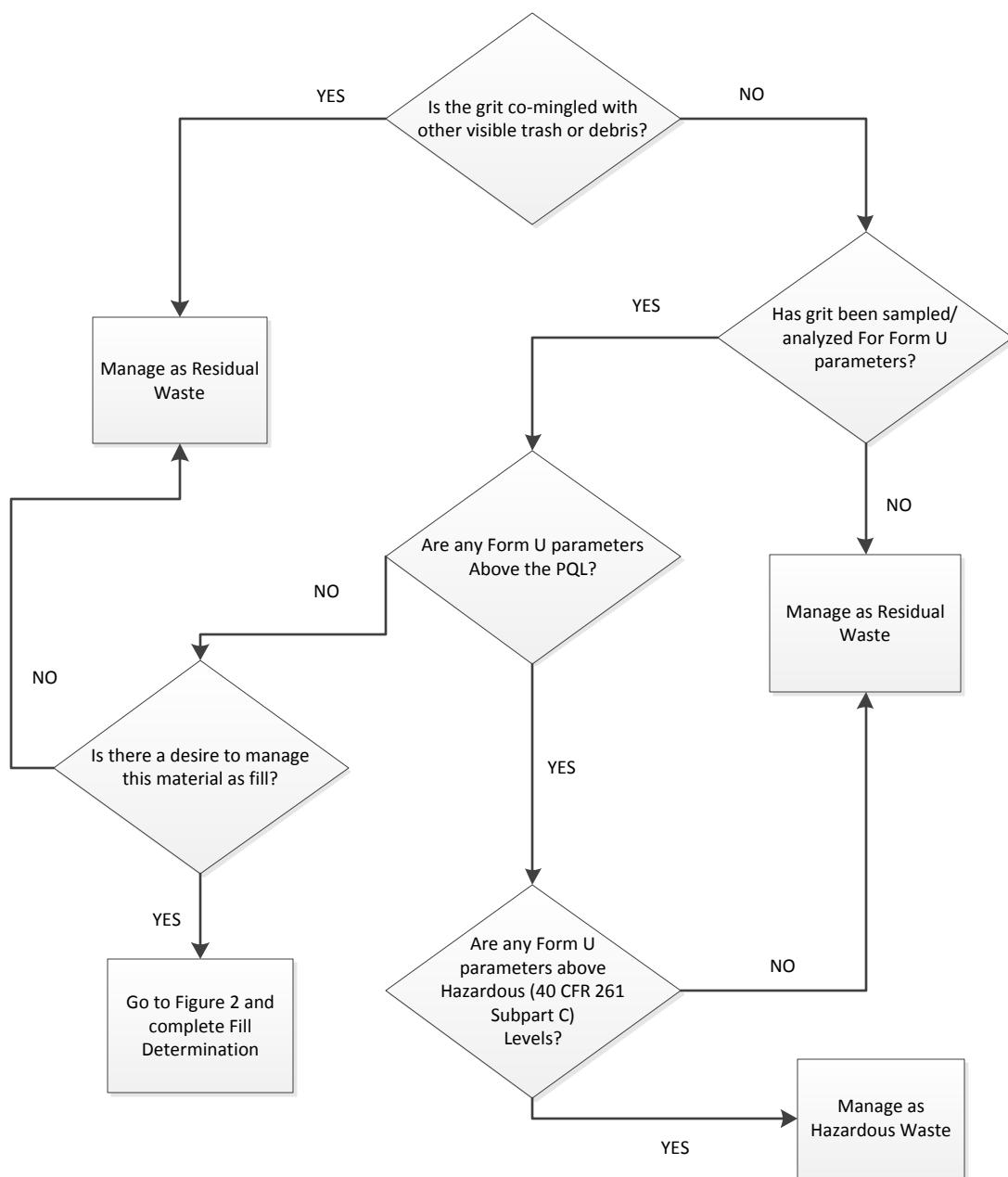
cc: Assistant District Executives – Maintenance
Maintenance Service Executives
Daryl St.Clair, P.E., Acting Special Assistant, Highway Administration
Richard Roman, P.E., Director, BOMO
Jonathan Fleming, Acting Chief, Maintenance Technical Leadership Division, BOMO
John Clarke, P.G., Professional Geologist, BOMO
David Condo, PhD., Environmental Chemist 2, BOMO
Winnie Okello, Civil Engineer, BOMO

TABLE 1
Wash Bay Grit Trap Waste Profiles
June 2015

Wash Bay Grit Trap Waste Profiles										
Color Key		June 2015								
VOCs	PCBs	SVOCs	Pesticides	Metals	14-Jan-15	14-Jan-15	14-Jan-15	15-Jan-15	29-Jan-15	4-Jun-14
Analyst	Units									Date Collected
TCLP 1,1-Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP 1,2-Dichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Benzene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Carbon tetrachloride	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Ethylbenzene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Ethylchloroform	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Ethylchloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Trichloro ethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Trichloro chloride	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP PEAK	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flashpoint	deg F	>140	>140	>140	>140	>140	>140	>140	>140	>140
Extricable Organic Halides	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Xylene	mg/kg	ND	110	ND	ND	ND	ND	ND	ND	ND
Oxydene	mg/kg	ND	5.4	ND	ND	ND	ND	ND	ND	ND
Toluene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
pH	5.0	6.76	6.45	6.41	6.87	6.74	6.91	7.07	8.29	8.37
Aschlor-2016	mg/kg									
Aschlor-1221	mg/kg									
Aschlor-1232	mg/kg									
Aschlor-1242	mg/kg									
Aschlor-1248	mg/kg									
Aschlor-1254	mg/kg									
Aschlor-1260	mg/kg									
Aschlor-1261	ppm									
Sulfide reactive	ppm									
TCLP Arsenic, total	mg/L									
TCLP Cadmium, total	mg/L									
TCLP Chromium total	mg/L									
TCLP Copper, total	mg/L									
TCLP Lead, total	mg/L									
TCLP Mercury, total	mg/L									
TCLP Nickel, total	mg/L									
TCLP Selenium, total	mg/L									
TCLP Silver, total	mg/L									
TCLP Zinc, total	mg/L									
1,1,1-Trifluoroethane	ug/L									
1,1,2,2-Tetrachloroethane	ug/L									
1,1,2,2-Tetrachloroethene	ug/L									
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1,1,2,2-Tetrachloroethene	ug/L									
1,1,2,2-Tetrachloroethane	ug/L				</					

TCLP 2,4,6-Tribromo phenol	ug/L							ND	ND
TCLP gamma-BHC	ug/L							ND	ND
TCLP heptadine	ug/L							ND	ND
TCLP heptin	ug/L							ND	ND
TCLP heptachlor	ug/L							ND	ND
TCLP heptachlor Epoxide	ug/L							ND	ND
TCLP heptachloroether	ug/L							ND	ND
TCLP hexachloroethane	ug/L							ND	ND
TCLP hexachloroethene	ug/L							ND	ND
TCLP hexachloroethane	ug/L							ND	ND
TCLP hexachloroethene	ug/L							ND	ND
TCLP hexachloroethane	ug/L							ND	ND
TCLP hexachloroethene	ug/L							ND	ND
TCLP hexachloroethane	ug/L							ND	ND
TCLP hexachloroethene	ug/L							ND	ND
Ammonia-N	mg/L							ND	ND
Chemical Oxygen Demand	mg/L							20	38
Oil/Grease/Extractable	mg/L							5	6.4
Oil/Grease/Silica Gel Treated	mg/L							4.8	ND

Figure 1 – Grit Waste Management Flowchart



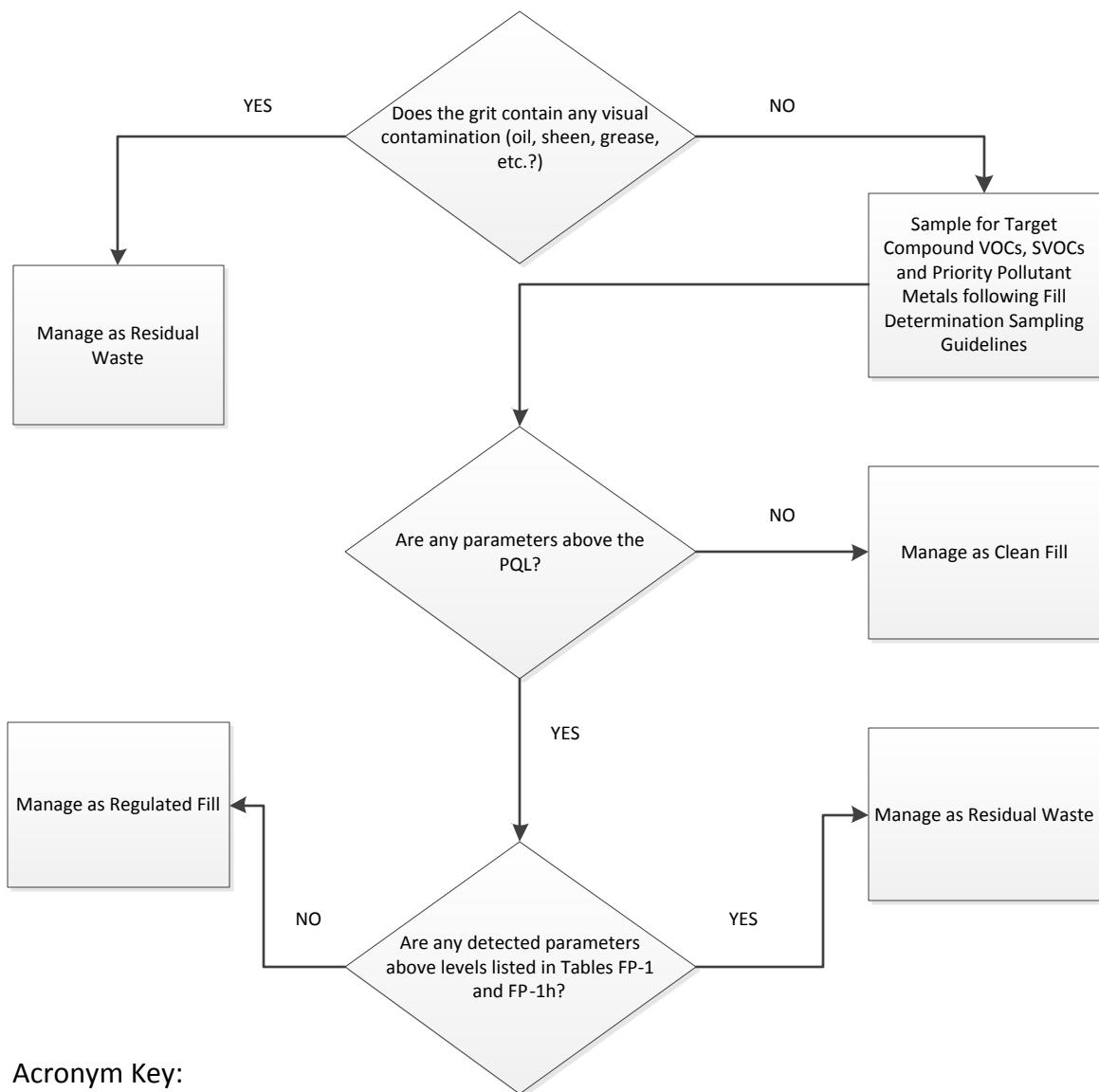
Acronym Key:

PQL – Practical Quantitation Limits

Form U – Request to process or dispose residual waste (2540-PM-LRWM0395)

Fill Determination Process

Figure 2 – Fill Determination Process



Acronym Key:

VOC – Volatile Organic Compounds

SVOC – Semi-Volatile Organic Compounds

PQL – Practical Quantitation Limits

FP-1 – Clean Fill Concentration Limit Table

FP-1h – Clean Fill Concentration Limit Table

Appendix O

PennDOT Waste Tracking Guidance



Agency Recycling Reporting

Welcome to the DGS Bureau of Surplus and Supplies recycling reporting tool. This survey is designed to collect information about recycling activities from all state agencies in support of the reporting requirements specified in Management Directive 205.22.

All agency locations are expected to report recycling activities on a monthly basis.

Section 1: Location and Reporter Information

* 1. Reporting Month/Year

	Month	Year
Choose the month/year when the reported data was recycled	<input type="text"/>	<input type="text"/>

* 2. Agency

* 3. Bureau/Office

* 4. Building Location Address

Address 1:

Address 2:

City:

Zip Code:

*** 5. Location County***** 6. Data Reporter Information**

Reporter Name:

Reporter Email:

Reporter Phone:

Section 2: Please report the total amount recycled for the items listed below.*** 7. Bottles and Cans**

Yes
 No

If Yes, please enter the approximate pounds (if known)

8. Paper Products: Report Total Amount Recycled in Pounds

Office Paper (lbs.)

Newspaper (lbs.)

Cardboard (lbs.)

Books (lbs.)

Other Paper (lbs.)

9. Is any money directly received for recycling any items in Section 2?

If yes, which items?

Section 3: Please report the total amount recycled and the recycling vendor used (if applicable).

The vendors listed are available through statewide contracts and should be utilized when possible.

10. Aluminum (lbs.)**11. Aluminum Vendor**

If Other, please specify

12. Antifreeze (gal.)**13. Antifreeze Vendor**

If Other, please specify

14. Batteries: Rechargeable (lbs.)**15. Batteries: Rechargeable Vendor**

If Other, please specify

16. Confidential Shredded Paper (lbs.)**17. Confidential Shredded Paper Vendor**

If Other, please specify

18. E-Waste (lbs.)**19. E-Waste Vendor**

If Other, please specify

20. Ferrous Metal (lbs.)**21. Ferrous Metal Vendor**

If Other, please specify

22. Oil (gal.)**23. Oil Vendor**

If Other, please specify

24. Tires/Rubber (lbs.)**25. Tires/Rubber Vendor**

If Other, please specify

26. Toner Cartridges (lbs.)**27. Toner Cartridges Vendor**

If Other, please specify

28. Is any money directly received for recycling any items in Section 3?

If yes, which items?

Section 4: Please report the total amount recycled and recycling vendor used (if applicable).

29. Ballasts

Quantity (each)

Recycling Vendor, if known

30. Batteries: Alkaline

Quantity (lbs.)

Recycling Vendor, if known

31. Batteries: Lead Acid

Quantity (lbs.)

Recycling Vendor, if known

32. Batteries: NiCad

Quantity (lbs.)

Recycling Vendor, if
known**33. Media / Secure Destruction (e.g. CDs, floppy disks, ID badges, etc.)**

Quantity (lbs.)

Recycling Vendor, if
known**34. Mercury Containing Bulbs**

Quantity (each)

Recycling Vendor, if
known**35. Pallets**

Quantity (each)

Recycling Vendor, if
known**36. Plastic (Drums or Other)**

Quantity (lbs.)

Recycling Vendor, if
known**37. Shrink Wrap**

Quantity (lbs.)

Recycling Vendor, if
known

38. Other Recycled Material #1

Item Name:

Quantity:

Measurement:

39. Other Recycled Material #2

Item Name:

Quantity:

Measurement:

40. Other Recycled Material #3

Item Name:

Quantity:

Measurement:

41. Is any money directly received for recycling any items in Section 4?

If yes, which items?



See how easy it is to [create a survey](#).

PennDOT Guide to Typical Waste Classification and Processing Methods

Note: The below information should be referenced only as a guide. The classification and processing method for each waste entry should still be verified.

Description	Typical Classification(s)	Typical Processing Method
Absorbents (Used Oil-Containing Kitty Litter, Pigs, Rags, etc.)	Typically residual waste (if used to clean-up oily spills), but can be hazardous waste (if used to collect a hazardous waste spill or for solvent-contaminated rags with free product) or not waste (solvent-contaminated rags sent for cleaning & reuse)	Landfilled
Aluminum Cans	Not waste (if source separated) or municipal waste (if not source separated and recycled)	Recycled
Aluminum, Waste	Not waste (if recycled)	Recycled
Antifreeze, Waste	Residual waste (unless exhibits hazardous waste characteristics)	Recycled
Asbestos-Containing Automotive Parts	Residual waste (special handling waste)	Landfilled or Recycled
Asphalt (Chunks)	Residual waste (not waste if used as clean fill)	Recycled or Landfilled
Ballasts, Non-PCB (As Labeled)	Universal waste	Recycled
Ballasts, PCB-Containing	Universal waste	Incinerated
Batteries, Automotive Truck	Universal waste, but can be hazardous waste (if broken)	Recycled
Batteries, Automotive/Non-Truck	Universal waste, but can be hazardous waste (if broken)	Recycled
Batteries, Non-Hazardous (Alkaline)	Municipal waste (if from office) or residual waste (if from shop/operations)	Landfilled
Batteries, Non-Hazardous (Carbon-Zinc)	Municipal waste (if from office) or residual waste (if from shop/operations)	Landfilled
Batteries, Rechargeable	Universal waste, but can be hazardous waste (if broken)	Recycled
Bottles, Glass	Not waste (if source separated) or municipal waste (if not source separated and recycled)	Recycled
Bottles, Plastic	Not waste (if source separated) or municipal waste (if not source separated and recycled)	Recycled
Cardboard (Loose or Stacked)	Not waste (if source separated) or municipal waste (if not source separated and recycled)	Recycled
Cartridges, Laser	Universal waste	Recycled
Catalytic Converter	Residual waste	Recycled
Clearing and Grubbing / Vegetative Waste	Municipal waste	Landfilled
Combustible Chemicals	Residual waste	Incinerated
Computer, CRT	Universal waste	Recycled
Computer, Desktop	Universal waste	Recycled
Computer, Flat Screen	Universal waste	Recycled
Computer, Laptop	Universal waste	Recycled
Drums, Plastic (Empty)	Residual waste	Recycled
Fiberglass Automotive Parts	Residual waste	Landfilled
Fluorescent Tubes	Universal waste, but can be hazardous waste (if broken)	Recycled
Fuel, Diesel (Contaminated)	Residual waste (if contaminated with water/dirt), but can be hazardous waste (if mixed with a hazardous waste)	Incinerated
Fuel, Gas (Contaminated)	Hazardous waste	Incinerated
Grinding Wheels; Sanding Discs; Welding Rods; Broken Tools	Residual waste	Recycled
Hazardous Waste (As Specified In Comments)	Hazardous waste (excess or outdated chemicals, etc.)	Incinerated
Lamps, Incandescent	Municipal waste (if from office) or residual waste (if from shop/operations)	Landfilled
Lamps, Mercury-Containing (Other than Fluorescent and Incandescent)	Universal waste, but can be hazardous waste (if broken)	Recycled
Mercury-Containing Equipment	Universal waste (thermostats, switches, thermometers, relays, manometers, barometers, thermocouples, & gauges)	Recycled
Metal Aerosol Cans (Empty)	Not waste (if recycled)	Recycled
Metal Aerosol Cans (Not Empty)	Typically residual waste (if the material contained is residual waste such as oil and lubricants), but can be hazardous waste (if the material contained is hazardous waste or the cans exhibit a hazardous characteristic), universal waste (if oil-based paint cans), or municipal waste (if the material contained is municipal waste)	Landfilled or Incinerated
Metals, Mixed Scrap	Not waste (if recycled)	Recycled
Newspaper (Loose)	Not waste (if source separated) or municipal waste (if not source separated and recycled)	Recycled
Oil, Waste	Residual waste (unless tested hazardous)	Recycled
Oily Water	Residual waste (from wash bay, etc. unless tested hazardous)	Landfilled
Other Municipal Waste (As Specified In Comments)	Municipal waste	Landfilled
Other Residual Waste (As Specified In Comments)	Residual waste (non-hazardous contaminated soil, debris, spill residue, etc.)	Landfilled
Paint, Waste	Residual waste (vehicle blasting paint chips or if not tested hazardous), but can be hazardous waste (lead-based paint chips or paint tested hazardous)	Landfilled
Paper, Office Mixed (Loose)	Not waste (if source separated), but municipal waste (if not source separated and recycled)	Recycled
Paper, Shredded (Loose)	Not waste (if source separated), but municipal waste (if not source separated and recycled)	Recycled
Parts Washer (Aqueous / Citrus)	Residual waste (parts cleaners, degreasers, solvents, etc. if not tested hazardous), but can be hazardous waste (if tested hazardous or based on generator knowledge)	Recycled
Parts Washer (Solvent, Non-Aqueous)	Hazardous waste (based on characteristic of solvent), but can be residual waste (based on characteristic of solvent; check SDS)	Recycled
Pesticide Containers, Empty (Triple-Rinsed)	Residual waste	Recycled
Pesticides and Associated Residues	Universal waste	Incinerated
Plastic Automotive Parts (PVC, Teflon, etc.)	Residual waste	Landfilled
Pumps; Piping; Storage Tanks	Residual waste	Recycled
Recycled Asphalt Pavement (RAP) / Millings	Not Waste (if recycled as coproduct), but can be residual waste (if disposed)	Recycled
Sandblast, Spent	Residual waste (if tested non-hazardous), but can be hazardous waste (if tested as hazardous)	Landfilled
Sludge (Aqueous)	Residual waste (wash bay sludge, fuel tank bottoms, etc.), but can be hazardous waste (if tested as hazardous)	Landfilled
Spent Filters (Air)	Residual waste	Landfilled
Spent Filters (Oil)	Residual waste (non-terne plated), but can be hazardous waste (terne-plated or used fuel/gas filters if determined to be hazardous)	Recycled or Landfilled
Street Sweepings	Municipal waste (as long as not commingled with other non-municipal waste)	Landfilled
Tires/Rubber	Residual waste	Recycled
Trash	Municipal waste (if from office) or residual waste (if from shop/operations)	Landfilled
Wipes, Disposable	Residual waste (solvent-contaminated wipes sent for disposal)	Incinerated or Landfilled
Wood (Pallets)	Municipal waste	Landfilled or Recycled

PennDOT Waste Tracking Tool Quick Guide

Supplement

Additional Information Output

Residual Waste	<ul style="list-style-type: none">● Select the “Residual Waste Status_Pounds” tab colored yellow and follow the instructions highlighted green to show the monthly quantity (in pounds) of residual waste shipped. Note: If the monthly average for each County/Location is highlighted red (>2,200 lbs), biennial reporting and source reduction strategy requirements apply.● Select the “Residual Waste Status_Tons” tab colored yellow and follow the instructions highlighted green to show the monthly quantity (in tons) of residual waste shipped. Note: If the annual total for each County/Location is highlighted red (>13 tons), biennial reporting and source reduction strategy requirements likely apply (according to PADEP guidance).● If it is determined that biennial reporting is required, select the “Residual Waste Biennial Report” tab and follow the instructions highlighted green to show the tons of residual waste shipped for each residual waste code (for entry into form 330-GM as a part of the biennial report). Note: Biennial reporting is required by March 1 of odd numbered years from the previous year.● Select the “Residual Waste Status_CAW” tab colored yellow and follow the instructions highlighted green to show the monthly quantity of residual waste types shipped for reference. Note: Generation of >2,200 pounds of residual waste in any single month may trigger chemical analysis of waste requirements.
Hazardous Waste	<ul style="list-style-type: none">● Select the “Hazardous Waste Status” tab colored pink and follow the instructions highlighted green to show the monthly quantity of hazardous waste types shipped. Note: Below are thresholds for determining generator status & biennial reporting is required for large quantity generators.<ul style="list-style-type: none">○ Conditionally Exempt Small Quantity Generator: ≤100 kg (220 lbs)/month of hazardous waste; ≤1 kg (2.2 lbs)/month or at any time of acute hazardous waste; ≤100 kg/month or at any time of acute hazardous waste spill clean-up material; or, ≤1000 kg (2,200 lbs) of hazardous waste at the site.○ Small Quantity Generator: >100 kg-≤1,000 kg/month of hazardous waste or ≤6000 kg (13,200 lbs) of hazardous waste at the site.○ Large Quantity Generator: >1,000 kg/month of hazardous waste; >1 kg/month or at any time of acute hazardous waste; or, >6000 kg of hazardous waste at the site.
Universal Waste	<ul style="list-style-type: none">● Select the “Universal Waste Status” tab colored orange and follow the instructions highlighted green to show the monthly quantity of universal waste types shipped. Note: Below are thresholds for determining universal waste generator status.<ul style="list-style-type: none">○ Small Quantity Handler of Universal Waste: Accumulates <5,000 kg (11,000 lbs) at any time.○ Large Quantity Handler of Universal Waste: Accumulates >5,000 kg (11,000 lbs) at any time.
Municipal Recycling	<ul style="list-style-type: none">● Select the “Municipal Recycling Reporting” tab colored purple and follow the instructions highlighted green to show the tons of recyclable materials generated. Note: Check specific municipal reporting requirements, but the information can likely be referenced for reporting to the municipality the amount (in tons) of various recyclable materials generated during the year.
Cost / Revenue	<ul style="list-style-type: none">● Select the “Cost_Revenue” tab colored red and follow the instructions highlighted green to show the associated cost of recycling/disposal and the revenue received for each waste stream as desired.

PennDOT Waste Tracking Tool Quick Guide

Accessing the Tool

- The file path for accessing the waste tracking tool spreadsheets is:
P:\penndot shared\SEMP EMS\Waste Tracking Spreadsheets Statewide\District Waste Tracking Spreadsheets
- Choose the spreadsheet for the appropriate District (do not change the file name).

Information Collection

- Information can be collected from manifests, shipping documents, weight tickets, invoices, work orders, receipts, certificates of disposal/recycling, etc.. Additionally, waste brokers, receiving facilities, site personnel, or IT personnel may be consulted to collect information. The following are some examples of typical secondary materials for which associated information is to be collected. **Note:** Refer to the “Guide” tab of the spreadsheet for more information.

Typical Hazardous Waste	Typical Universal Waste	Typical Municipal Waste	Typically Not Waste
<ul style="list-style-type: none">• Non-Aqueous Solvent• Volatile/Flam. Chemicals• Gasoline (and Mixtures)• Broken Batteries• Broken Lamps	<ul style="list-style-type: none">• Used Lamps• Used Batteries• Pesticides• Mercury-Containing Equipment	<ul style="list-style-type: none">• Office Trash• Cleared/Grubbed Waste• Vegetative Waste• Street Sweepings• Wood Pallets	<ul style="list-style-type: none">• Recycled Scrap Metal• Coproducts (RAP)• Source-Separated Recyclable Materials (glass/aluminum/paper)

Typical Residual Waste

<ul style="list-style-type: none">• Absorbents• Aerosol Cans (Empty)• Antifreeze• Asbestos-Containing Parts• Asphalt Chunks	<ul style="list-style-type: none">• Empty Containers• Fiberglass Parts• Oily Wash Bay Water• Paint (Vehicle Blasting)• Parts Washer (Citrus)	<ul style="list-style-type: none">• Plastic Auto. Parts• Sandblast Grit (Spent)• Trash (Shop/Operations)• Spent Air Filters• Spent Oil Filters	<ul style="list-style-type: none">• Solvent-Contaminated Wipes Sent for Disposal• Tires/Rubber• Wash Bay Sludge• Waste Oil
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Data Entry

- Select the first tab colored green.
- Enter or select (where a drop-down list is available) the specified information in the **green** cells on a line for each waste shipment. **Note:** When entering the waste quantity, ensure the units match those listed in the adjacent column “L.”

A	B	C	D	E	F	G	H
Name of Individual Entering Data	Shipment Date	County/ Location	Description	Comments	Classification	Processing Method	Revenue Received
1							
2 John Doe	02/04/16	Mifflin	Oil, Waste				
3 John Doe	02/26/16	Mifflin	Oil, Waste				
4 John Doe	02/27/16	Mifflin	Oil Water				
5 John Doe	03/31/16	Mifflin	Other Municipal Waste (As Specified In Comments)				
6 John Doe	05/07/16	Mifflin	Other Residual Waste (As Specified In Comments)				
7 John Doe	07/24/16	Mifflin	Paint, Waste				
8 John Doe	10/13/16	Mifflin	Paper, Office Mixed (Loose)				
			Paper, Shredded (Loose)				
			Parts Washer (Aqueous / Citrus)				
			Cardboard (Loose or Stacked)		Lewistown BORO		

Where a drop-down list is available, click the down arrow to then scroll to the appropriate selection.

- Additional information can be entered in the “Comments” column to the far right.
- Once associated DGS reporting has been completed, select “Yes” in column “J” for the respective waste shipments.

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Information Output – DGS Recycling

- Select the “DGS Quantity_Vendor Report” tab colored **blue** and follow the instructions highlighted **green** to show the quantity of recyclable material generated and the associated vendor(s) for entry into each DGS Survey Monkey question.
- Select the “DGS Revenue Report” tab colored **blue** and follow the instructions highlighted **green** to show the revenue received (if any) for various recycled material for entry into each DGS Survey Monkey question.

When following instructions highlighted green to make selections, click the drop-down icon to then check the appropriate box(es).

The screenshot shows a Microsoft Excel table with data for recycling vendors. A dropdown filter dialog is open, showing options for 'County/Location' (Centre, (All), (blank), Mifflin, Example) and 'Processing Method' (Recycled). The table includes columns for Row Labels, Sum of Quantity, and a Grand Total of 146109.0. A green box highlights the 'Centre' option in the dropdown and the 'Recycled' option in the table.

To “refresh” a table for information output, select “Options” and then the “Refresh” button.

The screenshot shows the PivotTable Tools ribbon with the 'Options' tab selected. The 'Refresh' button is highlighted. A dropdown menu for 'Refresh' is open, showing options: Refresh, Refresh All, Refresh Status, Cancel Refresh, and Connection Properties. A green box highlights the 'Refresh' option in the dropdown.

- Online reporting to DGS is required through <https://www.surveymonkey.com/r/RecyclingReport>.
- Reporting to DGS is required quarterly for any recyclables shipped (up to the reporting date) and not previously reported. Specific due dates for DGS reporting are as follows.
 - March 25th
 - June 25th
 - September 25th
 - December 23rd

Refer to the PennDOT Waste Tracking Tool Quick Guide Supplement for Additional Information Output Guidance