

# Hazardous Waste Management Regulations

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### Waste Management & Prevention Division

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## HAZARDOUS WASTE MANAGEMENT REGULATIONS TABLE OF CONTENTS

SUBCHA	APTER 1: GENERAL PROVISIONS	1-1
§ 7-101	AUTHORITY	1-1
§ 7-102	PURPOSE	1-1
§ 7-103	DEFINITIONS	1-1
§ 7-104	NOTIFICATION REQUIREMENTS	1-18
§ 7-105	EMERGENCY AND CORRECTIVE ACTIONS	1-18
§ 7-106	LAND DISPOSAL RESTRICTIONS	1-21
§ 7-107	GROUNDWATER PROTECTION	
§ 7-108	SIGNATORIES TO CERTIFICATION APPLICATIONS AND REPORTS	1-23
§ 7-109	INCORPORATIONS BY REFERENCE	1-24
§ 7-110	SEVERABILITY	1-26
§ 7-111	Variances	1-26
Ü		
SUBCH	APTER 2: IDENTIFICATION AND LISTING OF HAZARDOUS WASTE	2-1
§ 7-201	PURPOSE, SCOPE, APPLICABILITY	
§ 7-202	HAZARDOUS WASTE DETERMINATION	2-1
§ 7-203	CONDITIONAL EXEMPTIONS	
§ 7-204	RECYCLING EXEMPTIONS	
§ 7-205	CHARACTERISTIC OF IGNITABILITY	
§ 7-206	CHARACTERISTIC OF CORROSIVITY	
§ 7-207	CHARACTERISTIC OF REACTIVITY	
§ 7-208	CHARACTERISTIC OF TOXICITY	
§ 7-209	LISTS OF HAZARDOUS WASTES	
§ 7-210	HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES	
§ 7-211	VERMONT LISTED HAZARDOUS WASTES	
§ 7-212	HAZARDOUS WASTES FROM SPECIFIC SOURCES	
§ 7-213	HAZARDOUS CONSTITUENT WASTES	
§ 7-214	HAZARDOUS WASTES WHICH ARE DISCARDED COMMERCIAL CHEMICAL PRODUCT	
§ 7-215	ACUTELY HAZARDOUS WASTES	
§ 7-216	LISTING OF A HAZARDOUS WASTE	2-34
§ 7-217	DELISTING OF A HAZARDOUS WASTE	
§ 7-218	DELISTING OF SPILL CLEAN-UP DEBRIS AND RESIDUES	2-36
§ 7-219	SAMPLING, ANALYTICAL AND TESTING METHODOLOGIES	2-36
		- •
SURCH	APTER 3: HAZARDOUS WASTE GENERATOR STANDARDS	31
§ 7-301	APPLICABILITY, PURPOSE, SCOPE	
§ 7-301 § 7-302	PROHIBITIONS	
§ 7-302 § 7-303	HAZARDOUS WASTE DETERMINATION	
8 1-203	HAZANDOOS WASTE DETERMINATION	5-3

§ 7-304	NOTIFICATION, EPA IDENTIFICATION NUMBERS AND REGISTRATION	3-3
§ 7-305	GENERATOR CATEGORY DETERMINATION	3-4
§ 7-306	VERY SMALL QUANTITY GENERATOR	3-6
§ 7-307	SMALL QUANTITY GENERATOR	
§ 7-308	LARGE QUANTITY GENERATOR	3-13
§ 7-309	GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY	
U	GENERATORS	3-26
§ 7-310	ACCUMULATION OF HAZARDOUS WASTE	
§ 7-311	SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY	
0	GENERATORS	
§ 7-312	Managing Hazardous Waste from an Episodic Event	
§ 7-313	ADDITIONAL REQUIREMENTS	
	APTER 4: REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS W	
§ 7-401	PURPOSE, SCOPE, APPLICABILITY	4-1
§ 7-402		
§ 7-403	RESERVED	
§ 7-404	TRANSFER FACILITY STANDARDS	
§ 7-405	PROHIBITIONS	
§ 7-406	WASTE TRANSPORTATION PERMIT	
§ 7-407	MODIFICATION, SUSPENSION, REVOCATION, OR DENIAL OF A PERMIT	
§ 7-408	ACCEPTING SHIPMENTS OF HAZARDOUS WASTE	
§ 7-409	PERSONNEL TRAINING	
§ 7-410	LIABILITY INSURANCE REQUIREMENTS	
	APTER 5: REQUIREMENTS FOR HAZARDOUS WASTE TREATMENT, GE, AND DISPOSAL FACILITIES	
§ 7-501	PURPOSE, SCOPE, APPLICABILITY	
§ 7-502	EXEMPTIONS	
§ 7-503	EMERGENCY CERTIFICATION	
§ 7-504	GENERAL FACILITY CERTIFICATION STANDARDS	
§ 7-505	APPLICATION FOR INITIAL AND RENEWAL CERTIFICATION	
§ 7-506	PROCEDURE FOR CERTIFICATION	
§ 7-507	MODIFICATION OF CERTIFICATIONS	
§ 7-508	REVOCATION AND REISSUANCE OF CERTIFICATIONS	5-15
§ 7-509	VOLUNTARY AND INVOLUNTARY TERMINATION OF CERTIFICATIONS	
§ 7-510	INTERIM STATUS CERTIFICATION	
§ 7-511	SPECIAL CERTIFICATION	
§ 7-512	ADDITIONAL REQUIREMENTS	5-18
	APTER 6: STANDARDS FOR HAZARDOUS WASTES THAT ARE RECYC	
§ 7-601	PURPOSE, SCOPE, APPLICABILITY	
§ 7-602	DEFINITION OF HAZARDOUS WASTE RECYCLING	
§ 7-603	OTHER SECTIONS OF THESE REGULATIONS APPLICABLE TO HAZARDOUS WAST	ГЕ <b>6-</b> 1

§ 7-604	GENERAL STANDARDS APPLICABLE TO ALL HAZARDOUS WASTE RECYCLING	
	ACTIVITIES	
§ 7-605	HAZARDOUS WASTE RECYCLING BY GENERATORS	6-2
<b>§ 7-606</b>	HAZARDOUS WASTE RECYCLING AT OFF-SITE	6-3
§ 7-607	RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL	6-3
§ 7-608	RECYCLE/REUSE EXEMPTIONS FOR RECYCLABLE HAZARDOUS WASTES AND/OR	
	RECYCLING ACTIVITIES	6-3
SUBCHA	APTER 7: MANIFEST AND REPORTING REQUIREMENTS	7-1
§ 7-701	PURPOSE, SCOPE, APPLICABILITY	
§ 7-702	MANIFEST REQUIREMENTS APPLICABLE TO GENERATORS	7-2
§ 7-703	MANIFEST REQUIREMENTS FOR TRANSPORTERS	
§ 7-704	MANIFEST REQUIREMENTS FOR DESIGNATED FACILITIES	7-12
§ 7-705	Reserved	
§ 7-706	RESERVED	7-18
§ 7-707	EXCEPTION REPORTING	
§ 7-708	BIENNIAL REPORTING	7-19
§ 7-709	ADDITIONAL REPORTING	7-20
§ 7-710	RECORD RETENTION	7-20
SUBCHA	APTER 8: USED OIL MANAGEMENT STANDARDS	8-1
§ 7-801	PURPOSE AND APPLICABILITY	
§ 7-802	DEFINITIONS	
§ 7-803	PROHIBITIONS	
§ 7-804	EXEMPTIONS	
§ 7-805	USED OIL DETERMINATION	
§ 7-806	GENERAL USED OIL MANAGEMENT STANDARDS	8-6
§ 7-807	STANDARDS FOR USED OIL GENERATORS.	8-9
§ 7-808	STANDARDS FOR USED OIL AGGREGATION POINTS	
§ 7-809	STANDARDS FOR USED OIL FUEL MARKETERS	
§ 7-810	STANDARDS FOR USED OIL COLLECTION FACILITIES	8-12
§ 7-811	STANDARDS FOR USED OIL TRANSPORTERS	8-13
§ 7-812	STANDARDS FOR BURNING USED OIL FUEL FOR ENERGY RECOVERY	8-16
§ 7-813	STANDARDS FOR USED OIL PROCESSORS	8-19
_		
SUBCHA	APTER 9: UNIVERSAL WASTE MANAGEMENT STANDARDS	9-1
§ 7-901	PURPOSE, SCOPE AND APPLICABILITY	
§ 7-902	APPLICABILITY TO BATTERIES	
§ 7-903	APPLICABILITY TO PESTICIDES	
§ 7-904	APPLICABILITY TO MERCURY THERMOSTATS	
§ 7-905	APPLICABILITY TO PCB-CONTAINING FLUORESCENT LIGHT BALLASTS	-
§ 7-906	APPLICABILITY TO LAMPS	
§ 7-907	APPLICABILITY TO MERCURY-CONTAINING DEVICES	
§ 7-908	APPLICABILITY TO CATHODE RAY TUBES (CRTs)	
§ 7-909	APPLICABILITY TO POSTCONSUMER PAINT	
§ 7-910	APPLICABILITY TO AEROSOL CANS	

§ 7-911	DEFINITIONS
§ 7-912	STANDARDS FOR SMALL AND LARGE QUANTITY HANDLERS OF UNIVERSAL WASTE 9-8
§ 7-913	STANDARDS FOR UNIVERSAL WASTE TRANSPORTERS9-21
§ 7-914	STANDARDS FOR DESTINATION FACILITIES9-22
§ 7-915	IMPORT REQUIREMENTS9-23
§ 7-916	PETITIONS TO INCLUDE OTHER WASTES AS UNIVERSAL WASTES UNDER THIS
Ü	SUBCHAPTER9-24
SUBCHA	APTER 10: HAZARDOUS WASTE PHARMACEUTICALS 10-1
§ 7-1001	DEFINITIONS 10-1
U	APPLICABILITY
§ 7-1003	STANDARDS FOR HEALTHCARE FACILITIES MANAGING NON-CREDITABLE HAZARDOUS
	Waste Pharmaceuticals
§ 7-1004	STANDARDS FOR HEALTHCARE FACILITIES MANAGING POTENTIALLY CREDITABLE
	HAZARDOUS WASTE PHARMACEUTICALS
§ 7-1005	HEALTHCARE FACILITIES THAT ARE VERY SMALL QUANTITY GENERATORS FOR BOTH
	HAZARDOUS WASTE PHARMACEUTICALS AND NON-PHARMACEUTICAL HAZARDOUS
	WASTE
U	PROHIBITION OF SEWERING HAZARDOUS WASTE PHARMACEUTICALS
<b>§ 7-1007</b>	CONDITIONAL EXEMPTIONS FOR HAZARDOUS WASTE PHARMACEUTICALS THAT ARE
	ALSO CONTROLLED SUBSTANCES AND HOUSEHOLD WASTE PHARMACEUTICALS
	COLLECTED IN A TAKE-BACK EVENT OR PROGRAM
U	RESIDUES OF HAZARDOUS WASTE PHARMACEUTICALS IN EMPTY CONTAINERS 10-13
<b>§ 7-1009</b>	SHIPPING NON-CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A
	HEALTHCARE FACILITY OR EVALUATED HAZARDOUS WASTE PHARMACEUTICALS FROM
	A REVERSE DISTRIBUTOR
§ 7-1010	SHIPPING POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A
	HEALTHCARE FACILITY OR A REVERSE DISTRIBUTOR TO A REVERSE DISTRIBUTOR 10-15
§ 7-1011	STANDARDS FOR THE MANAGEMENT OF POTENTIALLY CREDITABLE HAZARDOUS
	WASTE PHARMACEUTICALS AND EVALUATED HAZARDOUS WASTE PHARMACEUTICALS
	AT REVERSE DISTRIBUTORS

#### APPENDICES

APPENDIX I	Hazardous Wastes from Specific Sources
APPENDIX II	Hazardous Constituents
APPENDIX III	Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either
APPENDIX IV	Acutely Hazardous Wastes

#### DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

APPENDIX V Reserved

APPENDIX VI Vermont Tax Codes

APPENDIX VII Examples of Potentially Incompatible Waste

APPENDIX VIII Reserved

APPENDIX IX Basis for Listing Hazardous Waste

#### Subchapter 1: GENERAL PROVISIONS

#### **§ 7-101** AUTHORITY

These regulations are promulgated by the Secretary of the Vermont Agency of Natural Resources pursuant to the authority granted by 3 V.S.A. § 2853(5) and 10 V.S.A. chapter 159.

**Note:** The term "these regulations," when used within this document, means chapter 7 of the Vermont Environmental Protection Rules (Hazardous Waste Management Regulations).

#### **§ 7-102** PURPOSE

These regulations are intended to protect public health and the environment by regulating the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste, used oil, universal waste, and pharmaceutical wase in Vermont.

#### § 7-103 DEFINITIONS

As used in these regulations, all terms not otherwise defined herein shall have the meaning given them in 40 CFR Parts 260 through 266, 268, and 270. Terms that are used only in subchapter 8 (used oil management standards), subchapter 9 (universal waste management standards) or subchapter 10 (pharmaceutical waste management standards) are defined therein.

- "Active life of a facility" means the period from the initial receipt of hazardous waste at the facility until the Secretary receives certification of final closure.
- "Acute hazardous waste" means hazardous wastes that are either listed in § 7-210 with the assigned hazard code of (H) or are listed in § 7-215.
- "Aerosol can" means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.
- "Agency" means the Vermont Agency of Natural Resources.
- "Airbag waste" means any hazardous waste airbag modules or hazardous waste airbag inflators.
- "Airbag waste collection facility" means any facility that receives airbag waste from airbag handlers subject to regulation under § 7-203(y), and accumulates the waste for more than ten days.
- "Airbag waste handler" means any person, by site, who generates airbag waste that is subject to regulation under subchapters 1 through 7 of these regulations.

"Boiler" means an enclosed device using controlled flame combustion and either:

- (a) Having the following characteristics:
  - (1) Having physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
  - (2) Being of integral design, in that the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) are physically formed into one manufactured or assembled unit, except that process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units are not precluded from being boilers solely because they are not of integral design. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not of integral design; however, a unit may be of integral design even though secondary energy recovery equipment (such as economizers or air preheaters) is not physically formed into the same unit as the combustion chamber and the primary energy recovery section; and
  - (3) Maintaining while in operation a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
  - (4) Exporting and utilizing at least 75 percent of the recovered energy, calculated on an annual basis, not including recovered heat used internally in the same unit, such as the preheating of fuel or combustion air, the driving of induced or forced draft fans or feed-water pumps; or
- (b) The device is one which the Secretary has determined, on a case-by-case basis, to be a boiler, after considering the standards in 40 CFR § 260.32.

"Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

"CERCLA" means the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

"Certificate of need" means a certificate issued by the Secretary pursuant to 10 V.S.A. § 6606a that must be obtained before a person may begin site preparation for or construction of a hazardous waste management facility.

"Certified hazardous waste facility" means a treatment, storage, or disposal facility which is authorized to operate under a federally approved state hazardous waste program, the federal hazardous waste program, or a foreign government.

"College/University" means 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.

- "Completed copy" means any copy of the manifest which has been signed by the generator, designated transporter, any continuing transporters, and the designated certified hazardous waste treatment, storage, or disposal facility.
- "Compliance points" or points of compliance means the locations identified in § 12-603 of the GWPRS.
- "Consignee" means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.
- "Container" means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.
- "Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of Subpart DD of 40 CFR Parts 264 or 265 (incorporated by reference in subchapter 5).

#### "Contaminated wipe" means:

- (a) A wipe that, after being used in a cleaning or degreasing process:
  - (1) Contains greater than 5% by weight of VT02 petroleum distillates listed in § 7-211;
  - (2) Contains one or more of the F001 through F005 solvents listed in § 7-210 or the corresponding P- or U- listed solvents found in §§ 7-214 and 7-215;
  - (3) Exhibits a hazardous characteristic found in §§ 7-205 through 7-208 when that characteristic results from a solvent listed in §§ 7-210 through 7-215; and/or
  - (4) Exhibits only the hazardous waste characteristic of ignitability found in § 7-205 due to the presence of one or more solvents that are not listed in §§ 7-210 through 7-215.
- (b) Contaminated wipes that contain listed hazardous waste other than VT02 petroleum distillates or the solvents specified in **subsection** (a)(2) of this section, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exemption at § 7-203(w).
- "Control" over a waste, unless otherwise defined in these regulations, means the possession, ownership or physical control of such waste, including but not limited to the following activities: (a) generation; (b) treatment; (c) storage; (d) transportation; or (e) disposal, whether or not such activity is authorized by law.
- "Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However,

the following materials are not debris: Any material for which a specific treatment standard is provided in 40 CFR §§ 268.40 through 268.49, namely lead acid batteries, cadmium batteries, and radioactive lead solids; Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by 40 CFR § 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

#### "Designated facility" means:

- (a) A hazardous waste treatment, storage, or disposal facility which:
  - (1) Has received a permit (or interim status) in accordance with the requirements of 40 CFR Parts 270 and 124;
  - (2) Has received a permit (or interim status) from a State authorized in accordance with **40 CFR Part 271**; or
  - (3) Is regulated under § 7-606(a) or Subpart F of 40 CFR Part 266 (Refer to § 7-204(g) Recyclable Materials Utilized for Precious Metal Recovery); and
  - (4) Has been designated on the manifest by the generator pursuant to § 7-702.
- (b) A generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with 40 CFR § 264.72(f) or 40 CFR § 265.72(f) (Refer to § 7-704(i)(4))
- (c) If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving State to accept such waste.
- "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 7-912(d)(3). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

#### "Discarded" A material is discarded if it is:

- (a) Abandoned by being:
  - (1) Disposed of; or
  - (2) Burned or incinerated; or
  - (3) Accumulated, stored, or treated before or in lieu of being abandoned by being disposed of, burned, or incinerated;
- (b) Recycled, until the recycling process has been completed;

- (c) Considered inherently waste-like as described in 40 CFR § 261.2(d);
- (d) Applied to or placed on the land in a manner that constitutes disposal, used to produce products that are applied to or placed on the land, or are otherwise contained in products that are applied to or placed on the land or
- (e) A military munition identified as a solid waste in 40 CFR § 266.202.
- "Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.
- "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, emitting, 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 ground or surface waters.
- "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.
- "Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.
- "Domestic sewage" means untreated sanitary wastes that pass through a sewer system to a sewage treatment plant.
- "Electronic manifest" (or "e-Manifest") means the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to that system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).
- "Electronic Manifest System" (or "e-Manifest system") means EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.
- "Elementary neutralization unit" means a device which:
- (a) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in § 7-206, or they are listed in §§ 7-210 through 7-215 only for this reason; and
- (b) Meets the definition of tank, tank system, container, transport vehicle, or vessel.

- **"Eligible academic entity"** means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.
- "Emergency response" means a response action to a situation that may cause immediate and serious threat of harm to human health or the environment.
- "Environmental Protection Agency" or "EPA" means the United States Environmental Protection Agency.
- **"EPA Acknowledgement of Consent"** means the cable sent to EPA from the U. S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.
- **"EPA Identification number"** means the location specific number assigned by either EPA or the Secretary to each generator, transporter and treatment, storage, or disposal facility.
- "EPCRA" means the federal Emergency Planning & Community Right to Know Act of 1986, as amended.
- "Episodic Event" means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.
- "Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.
- "Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

"Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

#### "Facility" means:

- (a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- (b) For the purpose of implementing corrective action under 40 CFR § 264.101 (incorporated by reference under subchapter 5), all contiguous property under the control of the owner or operator seeking certification under subchapter 5 of these regulations. This definition also applies to facilities implementing corrective action under RCRA § 3008(h).
- "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. § 136 et seq.
- "Final closure" means the cessation of hazardous waste management activities and either the closure of all short-term storage areas at a large quantity generator facility in accordance with the requirements of § 7-308(b)(16), or the closure of all hazardous waste management units at a facility in accordance with the facility closure plan and all applicable closure requirements of subchapter 5 so that hazardous waste management activities permitted under subchapter 5 are no longer conducted at the facility.
- "Generator" means any person, by site, whose act or process produces hazardous waste or whose act first causes hazardous waste to become subject to regulation. This includes any person who imports hazardous waste into Vermont from a foreign country.
- "Groundwater enforcement standards" means those standards adopted by § 12-601 of the Groundwater Protection Rule and Strategy.
- "Groundwater Protection Rule and Strategy" or "GWPRS" means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.
- "Hazardous material" means all petroleum and toxic, corrosive or other chemicals and related sludge included in any of the following:
- (a) Any substance defined in **CERCLA § 101(14)**;

- (b) Petroleum, including crude oil or any fraction thereof;
- (c) Hazardous waste; or
- (d) A chemical substance that, when released, poses a risk to human health or other living organisms and that is listed by the Secretary by rule.

**Note:** "Hazardous material" does not include herbicides and pesticides when applied consistent with good practice conducted in conformity with federal, state and local laws and regulations and according to manufacturers' instructions. Nothing in this subsection shall affect the authority granted and the limitations imposed by 10 V.S.A. § 6608a.

"Hazardous waste" means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which may have an unusually destructive effect on water quality if discharged to ground or surface waters of the state. All special nuclear, source, or by-product material, as defined by the Atomic Energy Act of 1954, as amended, codified in 42 U. S. C. § 2014, is specifically excluded from this definition.

"Hazardous waste management" means the systematic and comprehensive management of the generation, storage, transport, treatment, including recycling and recovery, or disposal of hazardous waste materials.

"Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). Business waste generated at a household is not household waste.

"Impervious surface" means a surface that is sufficiently impermeable to any waste material stored thereon to prevent that material from migrating into the surface (e.g., porous concrete) or to the soil, groundwater, or surface water.

#### "Incinerator" means any enclosed device that:

- (a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or
- (b) Meets the definition of infrared incinerator or plasma arc incinerator as defined in 40 CFR § 260.10.

#### "Incompatible waste" means a hazardous waste which is unsuitable for:

- (a) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e. g., container inner liners or tank walls); or
- (b) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(See Appendix VII for examples of potentially incompatible waste.)

"Industrial furnace" means an enclosed device that is an integral component of a manufacturing process, that uses thermal treatment to accomplish recovery of materials or energy, and that is listed as an "industrial furnace" in 40 CFR § 260.10.

"Investigation and Remediation of Contaminated Properties Rule" means chapter 35 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

"Laboratory" means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

"Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, concrete vault or bunker intended for disposal purposes.

**"Landfill"** means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Large quantity generator" means a generator who generates any of the following amounts in a calendar month:

- (a) Greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste; or
- (b) Greater than 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; or
- (c) Greater than 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 § 7-210 or § 7-215.

"Low-level mixed waste (LLMW)" is a waste that contains both low-level radioactive waste and RCRA hazardous waste.

"Low-level radioactive waste (LLW)" is a radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act. (See also NRC definition of "waste" at 10 CFR 61.2)

Manifest" means the shipping document EPA Form 8700–22 (including, if necessary, the continuation sheet document EPA Form 8700–22A), or the electronic manifest, originated and signed in accordance with the applicable requirements of 40 CFR Parts 262 through 265.

"Manifest tracking number" means the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits), which is pre-printed in Item 4 of the Manifest by a registered source.

"Manufacturing or mining by-product" is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

"Media" means environmental media (e.g., soil, groundwater).

"Military munitions" means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of

nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

- "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, containment building, corrective action management unit, or unit eligible for a research, development, and demonstration certification under § 7-511(c).
- "Mixed waste" means a waste that contains both RCRA hazardous waste and source, special nuclear, or byproduct material subject to the Atomic Energy Act of 1954, as amended.
- "No free liquids" as used in § 7-203(w), means that contaminated wipes may not contain free liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846), which is incorporated by reference, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by the Secretary.
- "Non-acute hazardous waste" means all hazardous wastes that are not acute hazardous waste.
- "Obsolete pesticide products" means concentrated pesticide products which are unusable due to damage to containers or the pesticide formulation; in damaged containers; pesticide products whose U. S. EPA registration number has been canceled or suspended leaving no valid registered uses on the label; or unwanted registered pesticide compounds which the generator wishes to dispose of.
- "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, is also considered on-site property.
- "Partial closure" means the closure of a short-term storage area at a large quantity generator in accordance with the applicable requirements of § 7-308(b)(16), or the closure of a hazardous waste management unit at a facility that contains other active hazardous waste management units in accordance with the facility closure plan and all applicable closure requirements of subchapter 5. For example, partial closure may include the closure of a short-term storage area at a large quantity generator that continues to generate hazardous waste and may maintain other active short-term storage areas; or the closure of a container storage area, tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit at a facility, while other units of the same facility continue to operate.

- "Person" means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department, or subdivision of the state, federal agency, or any other legal or commercial entity.
- "Pesticide" means 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, other than any article that:
- (a) Is a new animal drug under the **Federal Food, Drug, and Cosmetic Act (FFDCA)** section 201(w), or
- (b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or
- (c) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by subsection (a) or (b) of this definition.
- "Pesticidal wastes" means unwanted pesticides and their dilutions, rinses, and improperly rinsed containers.
- "Pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.
- "Planned episodic event" means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory
- **"Primary exporter"** means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with subchapter 7 when the manifest specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.
- "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 et seq, as amended.
- "RCRA hazardous waste" means hazardous waste regulated under Subtitle C of RCRA; it does not include other wastes regulated as hazardous waste by the State of Vermont that are not regulated under Subtitle C of RCRA.
- "Reclaimed" means that a hazardous waste is processed to recover the hazardous component of the waste as a usable product, or that it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.
- "Receiving country" means any foreign country to which hazardous waste is sent for the purpose of treatment, storage, or disposal (except short-term storage incidental to transportation).

- "Registration" means, for the purposes of § 7-304(e) and 10 V.S.A. § 6608(f), notifying the Secretary of hazardous waste activity using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) referenced in § 7-104(a), and paying the annual fee specified in 3 V.S.A. § 2822.
- "Release" means any intentional or unintentional action or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, dumping, or disposing of hazardous materials into the surface or groundwaters, or onto the lands in the State, or into waters outside the jurisdiction of the State when damage may result to the public health, lands, waters or natural resources within the jurisdiction of the State.
- "Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.
- "Restricted use pesticides" means pesticides that meet the criteria of 40 CFR § 152.170 and are identified by the designation "Restricted Use" on the product label. Restricted use pesticides are not available for purchase or use by the general public.
- "Scrap metal" means bits and pieces of metal parts (e. g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e. g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.
- "Secretary" means the Secretary of the Agency of Natural Resources or his or her duly authorized representative. When implementing the provisions of 10 V. S. A. §§ 6608a relating to economic poisons, the term shall also include the Secretary of the Vermont Agency of Agriculture, Food & Markets. When implementing the provisions of 10 V.S.A. § 6608b relating to low-level radioactive wastes mixed with hazardous waste, the term shall also include the Commissioner of the Vermont Department of Health.
- "Short-term storage area" means any on-site hazardous waste storage area with hazardous waste stored in units that are subject to either § 7-307 (for small quantity generators) or § 7-308 (for large quantity generators). A short-term storage area at an eligible academic entity that chooses to operate under 40 CFR §§ 262.200 through 262.216 (Subpart K) is also subject to 40 CFR § 262.211 when storing unwanted material and/or hazardous waste. The term "short-term storage area" shall have the same meaning as "central accumulation area" as used in 40 CFR Subpart K.
- "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.
- "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.
- "Small quantity generator" means a generator who generates the following amounts in a

#### calendar month:

- (a) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2200 lbs) of non-acute hazardous waste; and
- (b) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and
- (c) 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 § 7-210 or § 7-215.

"Soil" means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in 40 CFR § 268.3.

"Solid waste" means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment or solid or dissolved materials in industrial discharges which are point sources subject to permits pursuant to 10 V.S.A. chapter 47.

"Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both.

"Sorb" means to either adsorb or absorb, or both.

"Staging" means the temporary placement of off-site generated recyclable materials within a recycling facility for a period of time no longer than three (3) days.

"Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. Storage may be conducted by either generators or designated facilities. Hazardous waste that is being staged at a recycling facility for no more than three (3) days is not considered to be in storage.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal

from the system.

- "Surface impoundment" means a natural topographic depression, artificial excavation, or dike arrangement, including a pit, pond, or lagoon, whether or not it has a permeable bottom or sides allowing seepage of its contents, which is:
- (a) Used primarily for the storage, treatment, or disposal of hazardous waste in liquid, semisolid, or solid form; and
- (b) Constructed on, below, or partially in the ground.
- "Tank" means a stationary device, designed to contain an accumulation of hazardous waste, which is constructed primarily of non-earthen materials (e. g., wood, concrete, steel, plastic) that provide structural support.
- "Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.
- "Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.
- "Transport" or "transportation" means the movement of wastes by air, rail, highway, or water.
- "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, amenable for storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.
- "TSCA" means the Toxic Substances Control Act of 1976, 15 U.S.C. 2601, et seq, as amended.
- "Universal waste" means any of the following hazardous wastes that are subject to the universal waste requirements of subchapter 9:
- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;

- (f) Mercury-containing devices as described in § 7-907;
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and
- (i) Aerosol cans as described in § 7-910.

"Unplanned episodic event" means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as tornado, hurricane, or flood.

"Used" or "reused" means that a hazardous waste is either:

- (a) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a hazardous waste will not satisfy this condition if distinct components of the waste are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
- (b) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).
- "Used oil" means 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 does not include materials refined from crude oil that are fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits); these materials are subject to regulation under subchapters 1 through 7, as applicable.
- "User of the electronic manifest system" means a hazardous waste generator; a hazardous waste transporter; an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility; or any other person that:
- (a) Is required to use a manifest to comply with:
  - (1) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
  - (2) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and

- (b) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system; or
- (c) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with § 7-704(c)(5). These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

**Vermont Groundwater Protection Rule and Strategy or GWPRS** means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

"Very small quantity generator" means a generator who generates less than or equal to the following amounts in a calendar month:

- (a) 100 kilograms (220 lbs) of non-acute hazardous waste; and
- (b) 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and
- (c) 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 § 7-210 or § 7-215.

"Waste" means a material that is discarded or is being accumulated, stored, or physically, chemically or biologically treated prior to being discarded or has served its original intended use and is normally discarded or is a manufacturing or mining by-product and is normally discarded.

#### "Wastewater evaporation unit" means a tank or tank system that:

- (a) Heats wastewater to intentionally evaporate water to reduce the volume of the wastewater;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a); and
- (c) Is not used to dispose of hazardous waste.

Wastewater evaporation unit does not mean a sludge dryer.

#### "Wastewater treatment unit" means a device which:

- (a) Is part of a wastewater treatment facility that is subject to regulation under either §§ 402 or 307(b) of the Clean Water Act;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as

described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a);

- (c) Meets the definition of tank or tank system; and
- (d) Is not a wastewater evaporation unit.

"Wipe" means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

#### § 7-104 NOTIFICATION REQUIREMENTS

- (a) Except for persons who have been issued a temporary identification number pursuant to subsection (d) of this section, any person who generates or transports hazardous waste or who owns or operates a transfer facility or a facility for the treatment, storage, use, disposal, or recycling of hazardous waste shall notify the Secretary of such activity. In addition, persons managing waste under the provisions of the used oil management standards of subchapter 9, or the pharmaceutical waste management standards of subchapter 10, shall notify the Secretary of such activity as required under those subchapters. Notification shall be made by accurately and completely filling out the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) in accordance with the form's instructions.
- (b) Notification is required upon transferal of ownership of an entity that was required to notify the Secretary under **subsection** (a) of this section.
- (c) Persons subject to the requirements of this section shall maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) filed with the Secretary.
- (d) The Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event and do not otherwise generate hazardous waste.

#### § 7-105 EMERGENCY AND CORRECTIVE ACTIONS

(a) Emergency actions.

In the event of a release of a hazardous material (including discharges of hazardous waste), the person in control of such material shall:

(1) Take all appropriate immediate actions to protect human health and the environment including, but not limited to, emergency containment measures and notification as

- described below; and
- (2) Take any further clean-up actions as may be required and approved by federal, state, or local officials, or corrective actions as specified under **subsection** (f) of this **section** so that the released material and related contaminated materials no longer present a hazard to human health or the environment.
- (b) Immediate reporting. Pursuant to 10 V.S.A. § 6617, any person who has knowledge of an actual or suspected release of hazardous material and who may be subject to liability for a release as detailed under 10 V.S.A. § 6615 shall immediately report any release that:
  - (1) Exceeds 2 gallons;
  - (2) Is less than or equal to 2 gallons and poses a potential or actual threat to human health or the environment;
  - (3) Equals or exceeds its corresponding reportable quantity under CERCLA as specified under 40 CFR § 302.4; or
  - (4) Is of non-aqueous phase liquid (NAPL) petroleum, or a material detected in environmental media in an amount that exceeds an environmental media standard, pursuant to the criteria specified under §§ 35-102(b)(4) and (5) of the Vermont Investigation and Remediation of Contaminated Properties Rule, as amended.

**Note:** Reporting under **subsection** (b) **of this section** shall be directed as follows:

- Monday through Friday, 7:45 a.m. to 4:30 p.m., to the Waste Management & Prevention Division at (802) 828-1138.
- At all other times including State holidays to the Department of Public Safety, Division of Emergency Management at (800) 641-5005.

**Note:** Under the Federal Water Pollution Control Act, certain spills of "oil" and/or "hazardous substances" are prohibited and must be reported pursuant to the requirements of **40 CFR Part 110** / Discharge of Oil. Certain spills of hazardous substances must also be reported pursuant to CERCLA. In both cases, the National Response Center must be notified at (800) 424-8802. Finally, in addition to federal and state spill reporting, EPCRA requires that spills are also reported to local authorities.

(c) Written follow-up report. If requested by the Secretary, a written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (b) of this section**. The report shall be sent to: Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive – Davis 1, Montpelier, VT 05620-3704.

- (d) Releases during transportation.
  - (1) If a release occurs during transportation, the transporter shall:
    - (A) Report release to the Secretary in accordance with **subsection** (b) of this section;
    - (B) Notify the National Response Center at (800) 424-8802 or (202) 426-2675, if required by 49 CFR § 171.15; and
    - (C) Report in writing to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, if required by 49 CFR § 171.16; and
  - (2) A water (bulk shipment) transporter who has discharged hazardous wastes must give the same notice as required by **33** CFR § **153.203** for oil and hazardous substances.
- (e) Management of wastes, clean-up debris and residues.
  - (1) If a release occurs and the Secretary determines that immediate removal of waste material is necessary to protect human health or the environment, the Secretary may authorize its removal by unpermitted transporters without the preparation of a manifest. Such hazardous waste may be transported to a site authorized by the Secretary under the emergency certification provisions of § 7-503 to temporarily accept hazardous waste generated during an emergency clean-up of a release.
  - (2) In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers or hold Vermont hazardous waste transportation permits and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
  - (3) All clean-up debris and residues that are hazardous waste shall be stored in leak-proof containers that are covered so as to prevent contact of the waste with precipitation or run-on from precipitation.
  - (4) All clean-up debris and residues that are hazardous waste shall be sent to:
    - (A) A designated facility;
    - (B) A person authorized by the Secretary to use such waste if the waste has been

- delisted pursuant to § 7-218;
- (C) Some other location specified and authorized by the Secretary to receive clean-up debris and residues if the waste has been delisted pursuant to § 7-218; or
- (D) For Vermont-listed hazardous waste, in addition to the options provided under **subsections (4)(A) through (C) of this section**, to a facility, that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.

#### (f) Corrective action

- (1) In addition to any emergency response required pursuant to subsection (a) of this section, the Secretary may require that the person or persons responsible pursuant to 10 V.S.A. § 6615 take all necessary actions to investigate and remediate the release or discharge in accordance with 10 V.S.A. chapter 159 and the Vermont Investigation and Remediation of Contaminated Properties Rule. Additionally, the Secretary may require that the person or persons responsible for a release or discharge comply with the requirements of 40 CFR Part 264, Subpart F and § 12-607 (Corrective Actions) of the Vermont Groundwater Protection Rule and Strategy.
- (2) A used or fired military munition is a waste and is subject to corrective action authorities pursuant to 10 V.S.A. § 6615, and subsection (f)(1) of this section if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).
- (g) Compliance points. In the event of a release, compliance points for regulated activities shall be established pursuant to the **Vermont Groundwater Protection Rule and Strategy**.

#### § 7-106 LAND DISPOSAL RESTRICTIONS

- (a) Certain hazardous wastes shall not be disposed of in or on the land. 40 CFR Part 268, which is hereby incorporated by reference, except for 40 CFR §§ 268.5, 268.6, and 268.42(b), identifies those wastes which shall not be land disposed and describes the limited circumstances under which an otherwise prohibited waste may continue to be land disposed. The authority for implementing the CFR sections not incorporated by reference remains with the EPA.
- (b) In addition to the prohibitions of 40 CFR Part 268, the Secretary may restrict the land

disposal of any hazardous waste in the State of Vermont which:

- (1) May present an undue risk to human health or the environment, immediately or over a period of time;
- (2) Are prohibited under **Subchapter 4 of the Vermont Groundwater Protection Rule** and **Strategy** of chapter 12 of the Vermont Environmental Protection Rules, as amended; or
- (3) May adversely affect public trust uses of groundwater as defined in **Subchapter 3 of the Groundwater Protection Rule and Strategy** (Chapter 12 of the Vermont Environmental Protection Rules), as amended.
- (c) Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to 40 CFR § 268.3.

#### § 7-107 GROUNDWATER PROTECTION

- (a) Compliance; findings.
  - (1) Whereas, the **Vermont Groundwater Protection Rule and Strategy (GWPRS)** requires that these regulations include certain requirements, as necessary, to ensure that activities regulated by these regulations comply with requirements of the **GWPRS**;
  - (2) Whereas, 10 V.S.A. § 6616 and § 7-302(c) of these regulations prohibit the discharge or release of a hazardous waste to groundwater;
  - (3) Whereas, these regulations ensure that activities conducted in compliance with these regulations will not result in a discharge or withdrawal of groundwater;
  - (4) Whereas, any person who violates these regulations and discharges a hazardous waste into groundwater is required to immediately report that discharge and investigate and remediate the discharge pursuant to these regulations and the **Vermont Investigation** and **Remediation of Contaminated Properties Rule**, as amended;
  - (5) Therefore, compliance with these regulations will not result in an exceedance of groundwater enforcement standards at points of compliance or otherwise adversely affect public trust uses of groundwater in the State.
  - (6) Notwithstanding the provisions of this subsection, the Secretary may require any person subject to these regulations to demonstrate compliance with the **GWPRS**.
- (b) Management of groundwater. Notwithstanding any other provisions of these regulations, activities designated as high potential risk activities and moderate potential risk activities

by the GWPRS shall be managed in accordance with Subchapter 4 of the GWPRS.

#### § 7-108 SIGNATORIES TO CERTIFICATION APPLICATIONS AND REPORTS

- (a) Certification applications and information required by **subsection** (b) of this section shall be signed as follows:
  - (1) For a corporation, by a responsible corporate officer. A responsible corporate officer means:
    - (A) A president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
    - (B) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - (2) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
  - (3) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes:
    - (A) The chief executive officer of the agency; or
    - (B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- (b) All reports required by certifications, and at the discretion of the Secretary other information requested or required by the Secretary, shall be signed by a person described in **subsection** (a) of this section or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described in **subsection (a) of this section**;
  - (2) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

- (3) The written authorization is submitted to the Secretary.
- (c) If an authorization described in **subsection (b) of this section** is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirement of **subsection (b) of this section** must be submitted to the Secretary prior to or together with any documents signed by an authorized representative.
- (d) Certification. Any person signing a document pursuant to either **subsection** (a) or (b) of **this section** shall make the following 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 fine and imprisonment for knowing violations.

(e) The certification described in **subsection** (d) of this section need not appear on a manifest completed in accordance with subchapter 7 of these regulations.

#### § 7-109 Incorporations by Reference

- (a) When reference is made to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on July 1,2020, except that references to the ASTM test methods under § 7-205(a)(1), are to the test methods in SW-846 Test Methods 1010B or 1020C identified in the "Modernizing Ignitable Liquids Determinations" amendments made on July 7, 2020, at 85 FR 40594 through 40608.
- (b) The following federal regulations are incorporated by reference:
  - (1) 40 CFR §§ 266.100 through 266.107 and 266.109 through 266.112 for hazardous waste that is burned or processed in a boiler or industrial furnace (as defined in § 7-103). Any person in control of hazardous waste subject to this subsection also shall comply with all applicable provisions of the Vermont Air Pollution Control Regulations. The Secretary may, on a case-by-case basis, grant a variance from classification as a boiler. The standards and criteria used for this variance and the procedures followed shall be no less stringent than those in 40 CFR §§ 260.32 and 260.33.
  - (2) The Mixed Waste Rule of 40 CFR §§ 266.210 through 266.360 (Subpart N) except:

- (A) When the terms "we" or "us" are used within incorporated material, those terms mean the Secretary.
- (B) When incorporated materials reference "261.3" the reference shall mean **subchapter 2** of these regulations.
- (C) When incorporated materials reference "Parts 260 270" as a phrase, it means **subchapters 1 through 7** of these regulations.
- (3) The **40 CFR § 262.21** requirements for manifest tracking numbers, manifest printing, and obtaining manifests.
- (4) The Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities of 40 CFR §§ 262.200 through 262.216 (Subpart K) except:
  - (A) When the term "EPA Regional Administrator" is used within incorporated material, that term means the Secretary.
  - (B) The Laboratory Management Plan, and all substantive amendments to the procedures required by 40 CFR § 262.214(a) and subsection (C) of this section, shall be reviewed and approved by the Secretary prior to being incorporated into the plan.
    - **Note:** If there is a question if a change to a Laboratory Management Plan is substantive, a representative of the Eligible Academic Entity should contact the Secretary for clarification.
  - (C) The Laboratory Management Plan shall, in addition to the elements required by 40 CFR § 262.214(a), include procedures for:
    - (i) Inspecting at a specified frequency all laboratories covered by the requirements of the Laboratory Management Plan to assess conformance with the requirements of the Laboratory Management Plan. Results of such inspections must be retained for at least three years or, if inspections are scheduled more than three years apart, until the results of the next scheduled lab inspection have been documented; and
    - (ii) The identification of Laboratory Management Plan non-compliance, and the assignment of responsibility, timelines and corrective actions to prevent their reoccurrence.
  - (D) Each academic entity shall maintain up-to-date records that identify those laboratories covered by the requirements of the Laboratory Management Plan.
- (5) The 40 CFR §§ 262.80 through 262.89 (Subpart H) requirements for

Transboundary Movements of Hazardous Waste for Recovery and Disposal.

#### § 7-110 SEVERABILITY

The provisions of these regulations are severable. If any provision of these regulations is invalid or if any application of these regulations to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

#### § 7-111 VARIANCES

A person may apply to the Secretary for, and the Secretary may grant, a variance from these regulations in accordance with 10 V.S.A. § 6613.

#### Subchapter 2: IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

#### § 7-201 PURPOSE, SCOPE, APPLICABILITY

This subchapter identifies or otherwise describes those wastes subject to regulation as hazardous wastes under this chapter and assigns EPA or Vermont "hazardous waste codes" to them. It establishes procedures for determining whether a waste is hazardous waste and petitioning the addition or removal of a waste to or from the lists of hazardous wastes identified in this subchapter. It also identifies or references sampling, analytical and testing methods and procedures to be used for the purpose of establishing whether or not a waste is hazardous.

#### § 7-202 HAZARDOUS WASTE DETERMINATION

- (a) "Hazardous Waste" means any waste or combination of wastes which meets the definition in § 7-103, including but not limited to:
  - (1) Any waste which exhibits one or more of the characteristics described in §§ 7-205 through 7-208; except waste that is regulated because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-208, when the waste no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal. Moreover, a waste that exhibits the characteristic of toxicity that has been land disposed shall never cease to be a hazardous waste;
  - (2) Any waste which is listed in §§ 7-210 through 7-215 except waste that is listed solely because it exhibits one or more of the characteristics of ignitability as defined under § 7-205, corrosivity as defined under § 7-206, or reactivity as defined under § 7-207 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in §§ 7-205 through 7-208 of these regulations. However, wastes excluded under this section are subject to the requirements of 40 CFR Part 268 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal;
  - (3) Any mixture of a solid waste and a hazardous waste except as exempted in § 7-203(k);
  - (4) Any waste generated from the treatment, storage, disposal, or use of a hazardous waste (i.e., sludge, spill residue, ash, emission control dust, leachate, and precipitation runoff which comes in contact with the waste itself) except:
    - (A) A material that is reclaimed from a waste and that is used beneficially is not a waste and hence not a hazardous waste under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal;

and

- (B) Any waste generated from the treatment, storage, or disposal of hazardous waste that is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal;
- (5) Any waste derived from a waste listed in §§ 7-210 through 7-215;
- (6) Any waste generated from the discharge or release of a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215;
- (7) Any residues from a container or from the inner liner of a container which held a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215, except as exempted in § 7-203(j);
- (8) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens shall be presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II).
- (b) A person who generates a waste shall make an accurate determination as to whether that waste is a hazardous waste by using the following procedure:
  - (1) The hazardous waste determination for each waste shall be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the classification of the waste may change.
  - (2) A person shall determine if the waste is excluded from regulation under § 7-203 or § 7-204.
  - (3) If the waste is not excluded from regulation, the person shall use knowledge of the waste to determine if the waste meets any of the listing descriptions under §§ 7-210 through 7-215. Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under § 7-217 to demonstrate to the Secretary or EPA Administrator that the waste from this

- particular site or operation is not a hazardous waste.
- (4) The person shall also determine whether the waste exhibits one or more of the hazardous waste characteristics identified in §§ 7-205 through 7-208 by following the procedures in subsection (4)(A) or (B) of this section, or a combination of both.
  - The person shall apply knowledge of the hazard characteristic of the waste in light (A) of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method set forth under §§ 7-205 through 7-208, or an equivalent test method approved by the Administrator of EPA under 40 CFR § 260.21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests shall not, by themselves, provide definitive results. Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.
  - (B) When available knowledge is inadequate to make an accurate determination, the person shall test the waste according to the applicable methods set forth under §§ 7-205 through 7-208 or according to an equivalent method approved by the Administrator of EPA under 40 CFR 260.21 and in accordance with the following:
    - (i) Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.
    - (ii) Where a test method is specified under §§ 7-205 through 7-208, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.

**Note:** Waste that is listed as Vermont regulated hazardous waste under § 7-211 must be evaluated to determine whether or not it exhibits a hazardous waste characteristic.

- (5) If the waste is determined to be hazardous, the generator shall refer to 40 CFR Part 268 (incorporated by reference through § 7-106 of these regulations), and subchapters 1, 3, 5, 6, 7, 8, 9 and 10 for other possible exclusions or restrictions pertaining to management of the specific waste.
- (6) The person shall maintain records supporting its hazardous waste determinations, including records that identify whether a waste is a hazardous waste, as described in **subsection (a) of this section**. Records shall be maintained for at least three years

from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records must comprise the generator's knowledge of the waste and support the generator's determination, as described at **subsections** (b)(3) and (b)(4) of this section. The records shall include the following types of information: The results of any tests, sampling, waste analyses, or other determinations made in accordance with this section; records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and records which explain the knowledge basis for the generator's determination, as described at **subsection** (4)(A) of this section. The periods of record retention referred to in this section shall be extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as required by the Secretary.

(c) If the waste is determined to be hazardous, generators shall identify all applicable EPA and Vermont hazardous waste codes assigned to wastes identified in §§ 7-205 through 7-208 and §§ 7-210 through 7-215. Prior to shipping the waste off site, the generator also shall mark its containers with all applicable EPA and Vermont hazardous waste codes according to § 7-309(b)(1). If a waste is identified by both EPA and Vermont hazardous waste codes and descriptions, the EPA hazardous waste code and description shall be used for the purposes of these regulations.

#### (d) Military munitions

- (1) A military munition is a waste, therefore subject to a hazardous waste determination, if unexploded ordinance and contaminants are buried or disposed of on-range and the burial or disposal is not a result of product use.
- (2) An unused military munition is a waste, and subject to a hazardous waste determination, when any of the following occurs:
  - (A) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in § 7-203(z)(1)), incinerated, or treated prior to disposal;
  - (B) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal;
  - (C) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or
  - (D) The munition has been declared a waste by an authorized military official.
- (3) A used or fired military munition is a waste, and subject to a hazardous waste

#### determination:

- (A) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
- (B) If recovered, collected, and then disposed of by burial, or landfilling either on or off a range.

# § 7-203 CONDITIONAL EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if all conditions for exemption are met:

- (a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Persons managing household wastes that are of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of subchapter 9. Persons who commingle the household wastes together with universal waste regulated under subchapter 9 must manage the commingled waste under the requirements of that subchapter.
- (b) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment, except as prohibited by § 7-1006, in accordance with the provisions of a permit issued under 10 V.S.A. chapter 47.
- (c) Fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by 40 CFR § 266.112 (incorporated by reference through § 7-109(b)(1) of these regulations).
- (d) Mining overburden returned to the mine site.
- (e) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore), except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by 40 CFR § 266.112 (incorporated by reference through § 7-109(b)(1) of these regulations). For purposes of this section, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting [and/or autoclaving and/or chlorination]/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic

separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of this section, waste from the processing of ores and minerals includes only those listed by 40 CFR § 261.4(b)(7)(ii) as generated.

- (f) Hazardous waste containing radioactive waste ("mixed waste") when it meets the eligibility criteria and conditions of 40 CFR Part 266, Subpart N (incorporated by reference through § 7-109(b)(2) of these regulations).
- (g) In the case of any waste consisting of, containing, or derived from any waste or any product or constituent listed in §§ 7-210 through 7-215 of this subchapter, when it has been determined by the Secretary that the waste is not hazardous pursuant to the delisting procedures of § 7-217 or § 7-218.
- (h) A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit until it exits the unit in which it was generated provided:
  - (1) The unit is not a surface impoundment; and
  - (2) The hazardous waste remains in the unit for less than ninety (90) days after the unit ceases to be operated for manufacturing, storage, or transportation of a product or raw material.
- (i) Samples as follows:
  - (1) Except as provided in **subsection (2) and (4) of this section**, samples collected for the sole purpose of testing to determine their properties, characteristics or composition when:
    - (A) The sample is being transported to a laboratory for the purpose of testing;
    - (B) The sample is being transported back to the sample collector after testing;
    - (C) The sample is being stored by the sample collector before transport to a laboratory for testing;
    - (D) The sample is being stored in a laboratory before testing;
    - (E) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
    - (F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

- (2) In order to qualify for the exemption in **subsections (1)(A) and (B) of this section**, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
  - (A) Comply with U. S. Department of Transportation (DOT), U. S. Postal Service (USPS) and any other applicable shipping requirements; or
  - (B) Comply with the following requirements if the sample collector determines that DOT, USPS or other shipping requirements do not apply to the shipment of the sample:
    - (i) Assure that the following accompanies the sample:
      - (aa) The sample collector's name, mailing address and telephon number;
      - (bb) The laboratory's name, mailing address and telephone number;
      - (cc) The quantity of the sample;
      - (dd) The date of shipment; and
      - (ee) A description of the sample.
    - (ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in **subsection (1) of this section**.
- (4) In order to qualify for the exemption in **subsections** (1)(A) and (B) of this section, the mass of a sample that will be exported to a foreign laboratory or that will be imported to a U.S. laboratory from a foreign source must additionally not exceed 25 kg.
- (5) Treatability study samples as provided in 40 CFR §§ 261.4(e) and (f).
- (j) Containers and inner liners from containers of hazardous waste provided that the containers and inner liners are empty. Containers and inner liners are empty under the following conditions:
  - (1) For those containers or inner liners which have held hazardous waste, when all material has been removed using the practices commonly employed to remove materials from that type of container, and
    - (A) No more than one inch of residue remains on the bottom of the container or inner

liner; and

- (B) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or
- (C) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.
- (2) For those containers that held a hazardous waste that is a compressed gas, when the pressure in the container approaches atmospheric pressure.
- (3) For those containers or inner liners which have held acutely hazardous waste, pesticidal waste, or obsolete pesticide products:
  - (A) When the container or inner liner has been triple-rinsed with a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
  - (B) When the container or inner liner is cleaned by a method which the generator has demonstrated to achieve equivalent removal; or
  - (C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.
- (4) For containers of hazardous waste pharmaceuticals, when such containers are managed in accordance with the requirements of § 7-1008 for determining when they are considered empty.
- (k) Mixtures of solid waste and hazardous waste provided that:
  - (1) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the resultant mixture no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal.
  - (2) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the solid waste is excluded from regulation under§ 7-203(e), and the resultant mixture no longer exhibits any hazardous waste characteristic for which the hazardous waste in the mixture was listed. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at

- the point of land disposal.
- (3) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 and the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either § 402 or § 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) as specified in 40 CFR § 261.3(a)(2)(iv).
- (4) Nonwastewater mixtures are still subject to the requirements of 40 CFR Part 268 (incorporated by reference by § 7-106 of these regulations), even if they no longer exhibit a characteristic at the point of land disposal.

Note: Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to 40 CFR § 268.3 (incorporated by reference through § 7-106 of these regulations).

- (1) Water-miscible metal cutting and grinding fluid waste that does not exhibit a characteristic of hazardous waste as defined in §§ 7-205 through 7-208 provided:
  - (1) It is recycled or-treated on-site (e.g., centrifugation, evaporation of aqueous component, filtration and ultrafiltration) in accordance with § 7-502(o) or sent off-site for treatment; and

**Note**: Evaporation equipment must be operated in accordance with Vermont's Air Pollution Control Regulations.

- (2) Containers and/or tanks holding water-miscible metal cutting and grinding fluid are:
  - (A) Marked with words that identify the contents;
  - (B) Kept closed except to add or remove spent material;
  - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
  - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
- (3) If the waste is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (4) Any residue resulting from on-site recycling or treatment is managed either as used oil in accordance with the requirements of **subchapter 8**, or in accordance with applicable hazardous waste management requirements of **subchapters 1 through 7**; and

- (5) Any water resulting from on-site treatment that is authorized to be discharged in accordance with 10 V.S.A. chapter 47 (including for injection wells, direct discharges); and
- (6) Any water-miscible metal cutting and grinding fluid waste sent off-site for treatment are offered for transport only to a transporter permitted according to the requirements of **subchapter 4**.
- (m) Wood ash subject to regulation as hazardous waste only because it exhibits the characteristic of corrosivity described in § 7-206(a)(3) provided the ash is stored in a location that is either:
  - (1) Protected from precipitation; or
  - (2) Secure from public access (e.g., fenced) and has a sign posted warning of the corrosive hazard of wet wood ash.
- (n) Used oil that meets the criteria of the VT02 hazardous waste code and/or exhibits a hazardous waste characteristic, is not subject to the requirements of **subchapters 3 through 7** of these regulations, but is subject to the Used Oil Management Standards of **subchapter 8**.

**Note:** Pursuant to **10 V.S.A.** § **6621a**, no person shall knowingly dispose of used oil in a landfill.

- (o) Non-terne plated used oil filters that are not mixed with wastes listed in §§ 7-210 through 7-215 if:
  - (1) These oil filters have been gravity drained using one of the following methods:
    - (A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
    - (B) Hot-draining and crushing;
    - (C) Hot-draining and dismantling; or
    - (D) Any other equivalent hot-draining method that will remove used oil; or
    - (E) Draining and crushing using a mechanical, pneumatic, or hydraulic device designed for the purpose of crushing oil filters and effectively removing the oil; and
  - (2) All drained oils are collected and managed subject to these regulations.

**Note:** The Agency recommends that drained oil filters be recycled as scrap metal.

- (p) Petroleum contaminated soil provided:
  - (1) The soil does not exhibit a characteristic of hazardous waste as defined in §§ 7-205 through 7-208, with the exception that soil subject to the corrective action requirements of 40 CFR Part 280 is not subject to regulation as hazardous waste solely for the hazardous waste codes of D018 through D043 of §7-208; and
  - (2) The soil does not contain waste listed in §§ 7-210 through 7-215, with the exception that soil may contain waste identified by the VT02 hazardous waste code; and
  - (3) The soil is evaluated to establish the type and concentration of the contaminant(s) present in accordance with the Vermont **Investigation and Remediation of Contaminated Properties Rule**, as amended; and

**Note:** Field screening and laboratory analysis or testing must be conducted by an independent professional consulting firm or laboratory using a method or methods that are either identified under § 7-219 of these regulations or that are otherwise approved by the Secretary.

- (4) The soil is managed (e.g., stockpiled, treated, transported, or disposed) in accordance with the Vermont Investigation and Remediation of Contaminated Properties Rule, as amended.
- (q) Industrial discharges in compliance with **10 V.S.A. chapter 47**. This exemption applies only to the actual point source discharge. It does not exclude wastewaters while they are being collected, stored, or treated before discharge nor does it exclude sludges that are generated by industrial wastewater treatment.
- (r) Pesticidal wastes that are both generated and disposed of by the same farmer provided:
  - (1) The emptied pesticide container is triple-rinsed in accordance with the provisions of § 7-203(j); and
  - (2) The pesticide residues are disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label.
- (s) The wastes listed below are exempt from regulation under **subchapters 1 through 7** of these regulations except as specified in **subchapter 9** of these regulations. The following wastes are subject to regulation as universal wastes under **subchapter 9**:
  - (1) Batteries as described in § 7-902;
  - (2) Pesticides as described in § 7-903;
  - (3) Thermostats as described in § 7-904;

- (4) PCB-containing fluorescent light ballasts as described in § 7-905;
- (5) Lamps as described in § 7-906;
- (6) Mercury-containing devices as described in § 7-907;
- (7) Cathode ray tubes (CRTs) as described in § 7-908;
- (8) Postconsumer paint as described in § 7-909; and
- (9) Aerosol cans as described in § 7-910.
- (t) PCB-containing dielectric fluid and, with the exception of fluorescent light ballasts, electric equipment containing such fluid authorized for use and regulated under 40 CFR Part 761 of the Toxic Substances Control Act and that are hazardous only because they either meet the criteria of the VT01 hazardous waste identification code or fail the test for the Toxicity Characteristic (hazardous waste codes D018 through D043 only). This exemption is not applicable to waste contaminated with PCB-containing dielectric fluid.
- (u) The following materials provided they do not exhibit a characteristic identified in §§ 7-205 through 7-208:
  - (1) Hazardous debris as defined in 40 CFR Part 268 (Land Disposal Restrictions incorporated by reference through § 7-106) that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 40 CFR § 268.45; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
  - (2) Debris as defined in **40 CFR Part 268** (Land Disposal Restrictions incorporated by reference through § **7-106**) that the Secretary, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.
- (v) Waste which consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- (w) Contaminated wipes, as defined in § 7-103, that are to be sent off-site for cleaning and reuse, provided that:
  - (1) The contaminated wipes, when being accumulated and stored, and through the point in time when being transported off-site, are contained in non-leaking containers that are:

- (A) Marked "Excluded Contaminated Wipes"; and
- (B) Able to contain free liquids, should free liquids occur.
- (2) During accumulation, containers are kept closed except when it is necessary to add or remove contaminated wipes. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the container rim.
- (3) When a container becomes full or when contaminated wipes are no longer being accumulated, through the point in time when the container is transported off-site, the container is kept sealed with the lid properly and securely affixed to the container and all openings closed sufficiently to prevent leaks and emissions;
- (4) The contaminated wipes are accumulated by the generator for no more than 180 days from the start date of accumulation for each container prior to being sent for cleaning;
- (5) At the point when being transported off-site for cleaning, the contaminated wipes contain no free liquids as defined in § 7-103.
- (6) Free liquids removed from the contaminated wipes or from the container holding the wipes must be managed according to the applicable requirements of **subchapters 1 through 8** of these regulations;
- (7) Generators maintain at their site documentation that:
  - (A) Identifies the name and address of the laundry or dry cleaner that is receiving the contaminated wipes;
  - (B) Verifies the 180-day accumulation time limit requirement of subsection (4) of this section is being met;
  - (C) Provides a description of the process the generator is using to ensure the contaminated wipes contain no free liquids at the point of being transported offsite for laundering or dry cleaning;
- (8) The contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.
- (x) Reusable absorbent material, contaminated with used oil or petroleum distillate, that does not exhibit a hazardous waste characteristic provided that:
  - (1) The contaminated absorbent material is processed and reused on-site, any residual material that results from processing is managed in accordance with these regulations, and any contaminated water resulting from on-site processing is discharged in accordance with 10 V.S.A. chapter 47 (for indirect injection well, and direct discharges) and chapter 48 (for groundwater protection); and

- (2) Prior to being processed, the absorbent material is accumulated and stored on-site in containers that are:
  - (A) Marked with words that identify the contents;
  - (B) Kept closed except to add or remove spent material;
  - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration); and
  - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow.

# (y) Airbag waste

- (1) Airbag waste at the airbag waste handler or during transport to an airbag waste collection facility or designated facility is not subject to regulation under **subchapters 1 through 7** of these regulations provided that:
  - (A) The airbag waste is accumulated in a quantity of no more than 250 airbag modules or airbag inflators, for no longer than 180 days;
  - (B) The airbag waste is packaged in a container designed to address the risk posed by the airbag waste and marked "Airbag Waste-Do Not Reuse";
  - (C) The airbag waste is sent directly to either:
    - (i) An airbag waste collection facility in the United States under the control of a vehicle manufacturer or their authorized representative, or under the control of an authorized party administering a remedy program in response to a recall under the National Highway Traffic Safety Administration, or
    - (ii) A designated facility as defined in § 7-103;
  - (D) The transport of the airbag waste complies with all applicable U.S. Department of Transportation regulations in 49 CFR Parts 171 through 180 during transit;
  - (E) The airbag waste handler maintains at the handler facility for no less than three (3) years records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility. For each shipment, these records must, at a minimum, contain the name of the transporter and date of the shipment; name and address of receiving facility; and the type and quantity of airbag waste (i.e., airbag modules or airbag inflators) in the shipment. Confirmations of receipt must include the name and address of the receiving facility; the type and quantity of the airbag waste (i.e., airbag modules and airbag inflators) received; and the date which it was received. Shipping records and confirmations of receipt must be made

- available for inspection and may be satisfied by routine business records (e.g., electronic or paper financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).
- Once the airbag waste arrives at an airbag waste collection facility or designated facility, it becomes subject to all applicable hazardous waste regulations, and the facility receiving airbag waste is considered the hazardous waste generator for the purposes of the hazardous waste regulations and must comply with the applicable requirements of **subchapter 3**.
- (3) Reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the National Highway Traffic Safety Administration is prohibited.
- (z) A military munition when:
  - (1) Used for its intended purpose, including:
    - (A) Use for training military personnel or explosives and munitions emergency response specialists;
    - (B) Use in research, development, testing, or evaluation of military munitions, weapons, or weapon systems; or
    - (C) Recovery, collection, and on-range destruction of unexploded ordinance and munitions fragments during range clearance activities at active or inactive ranges.
  - (2) An unused military munition, or component of that munition, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured or otherwise subjected to materials recovery activities, unless those activities include use constituting disposal or burning for energy recovery.
- (aa) Consumer products that are available to the general public in the marketplace which were treated with perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid.
- (bb) Remediation wastes from an environmental response action that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes disposed in accordance with a corrective action plan or disposal plan approved by the Secretary.
- (cc) Sludges from wastewater treatment facilities, collected leachate from solid waste management facilities, and residuals from the treatment of drinking water that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes are disposed in accordance with a corrective action plan or disposal plan approved

by the Secretary.

### § 7-204 RECYCLING EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if they are recycled as specified and all conditions for exemption are met:

**Note**: Refer to **subchapter 6** for standards applicable to hazardous waste recycling activities not exempted under this section.

- (a) (1) Hazardous wastes, other than the wastes described in **subsections** (a)(2) of this section, that are recycled on-site in accordance with the applicable requirements of **subchapter** 6.
  - (2) The following materials are not exempt from the provisions of these regulations, even if they are recycled according to **subchapter 6**:
    - (A) Except as provided in § 7-204(k), materials used in a manner constituting disposal, or used to produce products that are applied to the land; or
    - (B) Except as provided in § 7-204(1), materials burned for energy recovery, used to produce a fuel, or contained in fuels; or
    - (C) Materials accumulated speculatively as defined in 40 CFR § 261.1(c)(8); or
    - (D) Inherently waste-like materials listed in 40 CFR §§ 261.2(d)(1) and (d)(2).
- (b) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose provided those solutions are managed prior to reuse according to the requirements of 40 CFR § 261.4(a)(9)(iii).
- (c) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood provided those wastewaters are managed prior to reuse according to the requirements of 40 CFR § 261.4(a)(9)(iii).
- (d) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- (e) Scrap metal that is recycled.
- (f) Spent lead-acid batteries that are reclaimed or regenerated, provided:

- (1) Persons who generate or collect spent lead-acid batteries, regenerate spent lead-acid batteries, or store spent lead-acid batteries but do not reclaim them (other than spent lead-acid batteries that are to be regenerated) store such batteries under cover on an impervious surface;
- (2) Transport of spent lead-acid batteries is done in compliance with 49 CFR Parts 171 through 177;
- (3) Persons who generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes are subject to regulation only as specified in the table included under 40 CFR § 266.80(a); and
- (4) Persons who store spent lead-acid batteries before reclaiming them, but do not reclaim them through regeneration are subject to regulations only as specified under 40 CFR § 266.80(b).
- (g) Recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals provided:
  - (1) Persons who generate, transport, store or recycle these recyclable materials comply with 40 CFR Part 266, Subpart F.
  - (2) Any generator or facility accumulating or storing these recyclable materials from which precious metals are reclaimed comply with any additional standards and requirements specified by the Secretary as necessary to protect human health and the environment. In making such determination, the Secretary shall use the standards and procedures specified in 40 CFR §§ 260.40 and 260.41.
- (h) Intact or shredded circuit boards being recycled provided that they are:
  - (1) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
  - (2) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
- (i) Spent ethylene glycol or water-based ethylene glycol solutions (e.g., antifreeze) that are subject to regulation as hazardous waste for meeting only the criteria of the VT08 hazardous waste code provided that:
  - (1) The spent ethylene glycol or water-based ethylene glycol solution is recycled for reuse (e.g., filtered) and/or treated for reuse (e.g., filtered, additives added); and
  - (2) Containers and/or tanks used to hold spent ethylene glycol or water-based ethylene glycol solution are:

- (A) Marked with words that identify the contents;
- (B) Kept closed except to add or remove spent material;
- (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration):
- (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
- (3) If the spent ethylene glycol or water-based ethylene glycol solution is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (4) Any residue resulting from on-site recycling and/or treatment that is hazardous waste is managed as hazardous waste.
- (j) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (k) Commercial chemical products that are applied to the land provided that land application is their ordinary manner of use.
- (l) Commercial chemical products that are themselves fuels (e.g., gasoline, aviation fuel, diesel fuel) provided:
  - (1) The commercial chemical product is burned for energy recovery, or is mixed or reclaimed to produce a fuel;
  - (2) The commercial chemical product is not mixed with non-fuel hazardous waste;
  - (3) The generator maintains a written record of any commercial chemical product shipped off-site that includes:
    - (A) The type and amount of material shipped;
    - (B) The date of generation;
    - (C) The date of shipment; and
    - (D) The name, address and phone number of the receiving facility;
  - (4) Prior to shipment off-site, the commercial chemical product is accumulated and stored in containers and/or tanks that are:
    - (A) Marked to identify the date the container or tank becomes full and with words that

- identify the contents as a usable fuel product;
- (B) Kept closed except when adding or removing material;
- (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
- (D) Kept on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
- (E) Handled and stored in a manner that minimizes the possibility of fire, explosion or a release or discharge to air, soil, groundwater, or surface water;
- (5) If the commercial chemical product is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (6) The commercial chemical product is shipped within 180 days from the date the container or tank becomes full to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; a designated facility; or an aggregation facility that meets the following:
  - (A) The owner of the facility has requested and received approval from the Secretary, using a form provided by the Secretary, to operate an aggregation facility. Any aggregation facility already in operations on the effective date of these regulations shall comply with the requirements of this section within 90 days of the effective date of these regulations.
  - (B) Commercial chemical product is not stored at the aggregation facility for more than 30 days.
  - (C) All commercial chemical product stored at the aggregation facility is shipped to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; or a designated facility.
  - (D) All commercial chemical product stored at the aggregation facility meets the following requirements:
    - (i) Containers must be kept closed except when adding or removing material, be marked with words that identify the contents as a usable fuel product, and be stored:
      - (aa) In a manner to prevent leakage or rupture;
      - (bb) Upon an impervious surface;
      - (cc) Such that the required marking is visible;

- (dd) With sufficient aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide;
- (ee) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
- (ff) Only with wastes or other materials that are compatible with the commercial chemical product;
- (gg) Within a structure that sheds rain and snow; and
- (hh) If the commercial chemical product is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing.
- (ii) Where applicable, underground storage tanks (USTs) holding commercial chemical product shall be:
  - (aa) Permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank Regulations; and
  - (bb) Equipped with fill pipes that are marked or labeled to clearly identify the contents of the UST as a usable fuel product.
- (iii) Where applicable, above-ground storage tanks (including unregistered tank trailers) holding a commercial chemical product shall be:
  - (aa) Installed and operated in accordance with Vermont Department of Labor Standards;
  - (bb) Clearly marked with words that identify the contents as a usable fuel product;
  - (cc) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs; and
  - (dd) If located out-of-doors, equipped with secondary containment as specified in 40 CFR §§ 279.45(e) and (f).
- (E) The owner or operator of the aggregation facility maintains a written operating log that identifies the date that commercial chemical product is received, the amount received, the location from where it was received, the date of shipment off-site, the

- amount shipped off site, and the location where it was sent.
- (F) The owner of the aggregation facility complies with the preparedness, prevention, and emergency procedure requirements of § 7-308(b)(13).
- (G) The owner of the aggregation facility has certified, using the form submitted to the Secretary pursuant to **subsection** (6)(A) of this section, that he or she will comply with the closure requirements of § 7-308(b)(16).

# § 7-205 CHARACTERISTIC OF IGNITABILITY

- (a) A waste is an ignitable hazardous waste if a representative sample of the waste has any of the following properties:
  - (1) It is a liquid, other than a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has a flash point less than 60 °C (140 °F), as determined by using one of the following ASTM standards: ASTM D93-79, D93-80, D3278-78, D8174-18, or D8175-18 as specified in SW-846 Test Methods 1010B or 1020C (incorporated by reference, see § 7-109(a));
  - (2) It is not a liquid and is capable under standard temperature and pressure of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard, or it is a solid-phase material and is determined to be an "ignitable solid" using the SW-846 Method 1030 test method;
  - (3) It is an ignitable compressed gas as defined in 40 CFR § 261.21(a)(3)(i) and shall be characterized as ignitable as determined by the test methods described in 40 CFR § 261.21(a)(3)(ii); or
  - (4) It is an oxidizer. An oxidizer for the purposes of this subchapter is a substance such as chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter. An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:
    - (A) The material meets the definition of a Division 1.1, 1.2, or 1.3 explosive, as defined in 40 CFR § 261.23(a)(8), in which case it must be classed as an explosive;
    - (B) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21;
    - (C) It is determined that the predominant hazard of the material containing an organic

- peroxide is other than that of an organic peroxide; or
- (D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation, it has been determined that the material does not present a hazard in transportation.
- (b) A waste that exhibits the characteristic of ignitability has the EPA hazardous waste code of D001.

# § 7-206 CHARACTERISTIC OF CORROSIVITY

- (a) A waste is a corrosive hazardous waste if a representative sample of the waste has any of the following properties:
  - (1) It is an aqueous solution which has a pH of less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)); or
  - (2) It is a liquid and corrodes steel (type SAE 1020) at a rate greater than 0.250 inch per year at a test temperature of 55°C (130°F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)); or
  - (3) It is a solid phase material at standard temperature and pressure which when mixed 50% by weight with distilled water yields a pH less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9045 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)).
- (b) A waste that exhibits the characteristic of corrosivity because it meets the criteria of subsection (a)(1) or (a)(2) of this section has the EPA hazardous waste code of D002. A waste that exhibits the characteristic of corrosivity because it meets the criteria of subsection (a)(3) of this section has the hazardous waste code of VT20.

### § 7-207 CHARACTERISTIC OF REACTIVITY

- (a) A waste is a reactive hazardous waste if a representative sample of the waste has any of the following properties:
  - (1) It is normally unstable and readily undergoes violent change without detonating;
  - (2) It reacts violently with water;

- (3) It forms potentially explosive mixtures with water;
- (4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
- (5) It is a cyanide or sulfide bearing waste which, when exposed to a pH condition between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
- (6) It is capable of detonation or an explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
- (7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure;
- (8) It is a forbidden explosive as defined in 49 CFR § 173.54, or is a Division 1.1, 1.2 or 1.3 explosive as defined in 49 CFR §§ 173.50 and 173.53.
- (b) A waste that exhibits the characteristic of reactivity has the EPA hazardous waste code of D003.

# § 7-208 Characteristic of Toxicity

- (a) A waste is a hazardous waste if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)), the extract from a representative sample of the waste contains any of the contaminants listed in **Table 1** at the concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5% filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purposes of this section.
- (b) A waste that exhibits the characteristic of toxicity has all applicable EPA hazardous waste codes specified in **Table 1** which correspond to any of the toxic contaminants listed in Table 1 that cause it to be hazardous.

Table 1
MAXIMUM CONCENTRATION OF CONTAMINANTS
FOR THE CHARACTERISTIC OF TOXICITY

Hazardous Waste Code	Contaminant	CAS Number	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D006	Cadmium	7440-43-9	1.0
D007	Chromium	7440-47-3	5.0
D008	Lead	7439-92-1	5.0
D009	Mercury	7439-97-6	0.2
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D012	Endrin(1,2,3,4,10,10-Hexachloro-1,7-epoxy-1,4,4a,5,6,7,8 8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene)	72-20-8	0.02
D013	Lindane (1,2,3,4,5,6-Hexachlorocyclo- hexane, gamma isomer)	58-89-9	0.4
D014	Methoxychlor (1,1,1-Trichloro-2,2-bis[p-methoxyphenyl] ethane)	72-43-5	10.0
D015	Toxaphene (C <sub>10</sub> H <sub>10</sub> C <sub>18</sub> , Technical chlorinated camphene, 67 to 69 percent chlorine)	8001-35-2	0.5
D016	2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	10.0
D017	2,4,5-TP Silvex (2,4,5-Trichloro- phenoxypropionic acid)	93-72-1	1.0
D018	Benzene	71-43-2	0.5
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D023	o-Cresol	95-48-7	$200.0^{1}$
D024	m-Cresol	108-39-4	$200.0^{1}$
D025	p-Cresol	106-44-5	$200.0^{1}$
D026	Cresol		$200.0^{1}$
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5

 $<sup>^{1}</sup>$  If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

Hazardous Waste Code	Contaminant	CAS Number	Regulatory Level (mg/L)
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	$0.13^2$
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	$0.13^2$
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	$5.0^{2}$
D039	Tetrachloroethylene	127-18-4	0.7
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D043	Vinyl Chloride	75-01-4	0.2

Note: "CAS" Number means Chemical Abstract Service Number.

# § 7-209 Lists of Hazardous Wastes

(a) Reserved.

(b) The following hazardous wastes listed in § 7-210 are subject to the exclusion limits for acutely hazardous wastes established in § 7-306(a): hazardous waste codes F020, F021, F022, F023, F026, and F027.

(c) The wastes listed in §§ 7-210, 7-211, 7-212, 7-214 and 7-215 are identified as toxicity characteristic waste (E), toxic waste (T), reactive waste (R), corrosive waste (C), ignitable waste (I), acutely hazardous waste (H), or a combination thereof.

<sup>2</sup> Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

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# § 7-210 HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES

The following wastes are listed hazardous wastes from non-specific sources:

Hazardous Waste Code	Hazardous Wastes from Non-Specific Sources	Hazard
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-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluor- oethane, 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.	(T)
F003	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.	(I)*
F004	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.	(T)
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 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)
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 of carbon steel; and (6) chemical etching and milling of aluminum.	(T)

Hazardous Waste Code	Hazardous Wastes from Non-Specific Sources	Hazard
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 from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes (except wastewater 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).	(H)
F021	Wastes (except wastewater 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.	(H)
F022	Wastes (except wastewater 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.	(H)
F023	Wastes (except wastewater 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).	(H)
F024	Process wastes, including 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 <b>Appendix I</b> ).	(T)

Hazardous Waste Code	Hazardous Wastes from Non-Specific Sources	Hazard
F025	Condensed light ends, 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.	(T)
F026	Wastes (except wastewater 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-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused 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).	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F023, F026, and F027.	(T)
F032	Wastewaters (except those 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 40 CFR § 261.35 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.	(T)
F034	Wastewaters (except those 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.	(T)
F035	Wastewaters (except those 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.	(T)

Hazardous Waste Code	Hazardous Wastes from Non-Specific Sources	Hazard
F037	Petroleum refinery 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 oily 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 40 CFR § 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. (Refer to 40 CFR § 261.31(b) for listing specific definitions.)	(T)
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 dissolved air flotation (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 40 CFR § 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. (Refer to 40 CFR § 261.31(b) for listing specific definitions.)	(T)
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under <b>Subpart D of 40 CFR Part 261</b> (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 code(s): F020, F021, F022, F026, F027, and/or F028.).	(T)

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

# § 7-211 VERMONT LISTED HAZARDOUS WASTES

The following wastes are listed in Vermont as hazardous wastes:

**Note:** A waste that exhibits a hazardous waste characteristic or that is federally listed must be identified by its EPA hazardous waste code (refer to § 7-202(c)).

Hazardous Waste Code	Vermont Listed Hazardous Waste	Hazard
VT01	Wastes containing polychlorinated biphenyls (PCB) in concentrations equal or greater than 50 parts per million.  Note: Certain waste PCB-containing dielectric fluids, and electric equipment containing such fluid are exempted under § 7-203(t); PCB-containing fluorescent light ballasts managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s).	(T)
VT02	Waste containing greater than 5% by weight of petroleum distillates with melting points of less than 100°F, including but not limited to kerosene, fuel oil, hydraulic oils, lubricating oils, penetrating oils, tramp oils, quenching oils, and crankcase and automotive oils.  Note: Wastes with a flashpoint less than 140°F are classified as D001 (ignitable).  Note: Exemptions are provided for: used oil under § 7-203(n); oil filters under § 7-203(o); and petroleum contaminated soil under § 7-203(p).	(I,T)
VT03	Waste water-miscible metal cutting and grinding fluid.  Note: Certain recycled or treated water-miscible metal cutting and grinding fluid wastes are exempted under § 7-203(l).	(T)
VT06	Pesticidal wastes of products classified under FIFRA as restricted use pesticides not specifically listed in subchapter 2.  Note: Certain pesticides managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s).	(T)
VT08	Waste ethylene glycol and solutions containing greater than 700 parts per million of ethylene glycol (e.g., coolants, antifreeze).  Note: Spent ethylene glycol and water-based ethylene glycol solutions that are recycled for reuse are exempted under § 7-204(i).	(T)
VT11	Wastes determined to be hazardous pursuant to § 7-216.	(I,T,C,R,H)
VT20	A solid material that when mixed with an equal weight of distilled water causes the liquid fraction of the mixture to exhibit the properties of the corrosivity characteristic as specified in § 7-206(a)(3).	(C,R)

Hazardous Waste Code	Vermont Listed Hazardous Waste	Hazard
VT21	Liquid wastes containing perfluorooctanoic acid (PFOA) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard).	(T)
VT22	Liquid wastes containing perfluorooctanesulfonic acid (PFOS) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard).	(T)
VT99	Non-hazardous waste.  Note: This hazardous waste code is to be used only for non-hazardous waste shipped using a hazardous waste manifest.	N/A

### § 7-212 HAZARDOUS WASTES FROM SPECIFIC SOURCES

Hazardous wastes from specific sources are listed in **Appendix I**.

# § 7-213 HAZARDOUS CONSTITUENT WASTES

Wastes containing any of the hazardous constituents listed in **Appendix II** are hazardous wastes when:

- (a) The waste is not excluded from regulation under § 7-203 or § 7-204; and
- (b) The Secretary concludes, following the listing procedures in § 7-216, that the waste meets the definition of hazardous waste in § 7-103.

#### § 7-214 HAZARDOUS WASTES WHICH ARE DISCARDED COMMERCIAL CHEMICAL PRODUCTS

The following materials or items are hazardous waste if and when they are discarded or intended to be discarded, 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, 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. The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in **subsections (a) through (d) of this section**, are identified as toxic wastes (T) unless otherwise designated.

(a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**;

Note: 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 **Appendix III**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix III**, such waste will be listed in either § 7-210 or § 7-212 or will be identified as a hazardous waste by the characteristics set forth in §§ 7-205 through 7-208.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**;
- (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 **Appendix III**, unless the container is empty as defined in § 7-203(j).

**Note:** 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, the Secretary 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 clean-up of a release or discharge into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**, or any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**.

**Note:** 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.

# § 7-215 ACUTELY HAZARDOUS WASTES

The following materials or items are acutely hazardous wastes if and when they are discarded or intended to be discarded, 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, when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of the 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. The commercial chemical products, manufacturing chemical intermediates or offspecification commercial chemical products or manufacturing chemical intermediates referred to in subsections (a) through (d) of this section, are identified as acute hazardous wastes (H).

(a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix IV**;

Note: 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 **Appendix IV**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix IV**, such waste will be listed in either § 7-210 or § 7-212 or will be identified as a hazardous waste by the characteristics set forth in §§ 7-205 through 7-208.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.
- (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 **Appendix IV**, unless the container is empty as defined in § 7-203(j) or § 7-1008.

**Note:** 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, the Secretary 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 clean-up of a release or discharge into or on any land or water of any commercial chemical product or

manufacturing chemical intermediate having the generic name listed in **Appendix IV**, or any residue or contaminated soil, water or other debris resulting from the cleanup of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.

**Note:** The primary hazardous properties of these materials are indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for toxicity.

# § 7-216 LISTING OF A HAZARDOUS WASTE

- (a) Any person requesting the addition of a generic class of wastes to the lists at §§ 7-210 through 7-215, shall file a petition for rulemaking with the Secretary. Prior to adopting a rule listing a generic class of wastes as a hazardous waste, the Secretary shall consider the following factors:
  - (1) The toxicity of the waste;
  - (2) The waste's persistence and degradability in the environment;
  - (3) The waste's potential to concentrate or bioaccumulate in tissue;
  - (4) The waste's potential to cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms; and
  - (5) The waste's potential to have an unusually destructive effect on water quality if discharged to ground or surface water.
- (b) For generators whose waste is not listed as a hazardous waste, the Secretary, upon petition or on his or her own motion, may, on a case-by-case basis, make the determination that a waste generated by a particular generator or treated, stored or disposed of by a particular facility, meets the definition of hazardous waste at § 7-103.
  - (1) Upon making the determination that a particular waste is hazardous, the Secretary shall notify the waste generator of this determination by certified letter. The letter shall include a fact sheet which briefly sets forth the principal facts and significant factual, methodological, and policy questions concerning the hazard determination.
  - (2) Within 30 days following receipt of a hazard determination, the generator may request a hearing before the Secretary to contest that determination. The request for hearing shall state the technical and legal questions at issue and shall contain the necessary documents to support the request.
  - (3) If no request for hearing is filed within 30 days, the generator shall be deemed to have

accepted the hazard determination for the waste in question.

- (c) When making a determination under **subsection** (b) of this section, the Secretary shall examine and consider the following factors:
  - (1) The nature of the hazard presented by the waste;
  - (2) The amount and concentration of all hazardous constituents in the waste;
  - (3) The potential of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents to migrate from the waste into the environment;
  - (4) The persistence of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents;
  - (5) The degree to which all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents bioaccumulate in ecosystems;
  - (6) The plausible types of improper management to which the waste could be subjected;
  - (7) The quantity of waste involved;
  - (8) The nature and severity of the damage to human health and the environment that has occurred as a result of the improper management of the type of waste involved;
  - (9) Actions taken by other governmental agencies or regulatory programs based on the hazard to human health or the environment posed by the waste or any hazardous constituent in the waste; and
  - (10) Such other factors as may be appropriate.
- (d) Prior to making any determination under **subsection** (b) of this section, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

## § 7-217 DELISTING OF A HAZARDOUS WASTE

- (a) Generators may petition the Secretary to classify their waste as non-hazardous, if they generate either a waste listed at §§ 7-210 through 7-215 or a mixture which contains a waste listed at §§ 7-210 through 7-215.
- (b) The Secretary, upon petition or his or her own motion, may make the determination that a waste which is generated by a particular generator or treated, stored, or disposed of by a particular facility does not meet the definition of hazardous waste at § 7-103 subject to

the restrictions listed below.

- (c) Any person seeking to exclude a waste at a particular generating facility from lists in Subpart D of 40 CFR Part 261 may petition for a regulatory amendment under 40 CFR § 260.20 and § 260.22. The Administrator of EPA shall retain the authority to exclude such wastes. Delisting determinations made by the EPA Administrator shall take effect in Vermont upon issuance of a "concurrence" letter sent by the Secretary to the EPA Administrator.
- (d) For any waste listed at §§ 7-210 through 7-215 of this subchapter and not listed by EPA as a hazardous waste, the petition to delist shall be made on the delisting form entitled "Petition Procedures for the Listing and Delisting of Hazardous Waste," provided by the Secretary.
- (e) After receipt of a petition under this section, the Secretary may request any additional information which may be reasonably required to evaluate the petition.
- (f) The Secretary shall evaluate each delisting petition using the procedures described in § 7-216(b).
- (g) When making a determination under this section, the Secretary shall examine and consider the factors in § 7-216(c).
- (h) Except as provided in § 7-218, prior to making any determination under this section, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

## § 7-218 DELISTING OF SPILL CLEAN-UP DEBRIS AND RESIDUES

The Secretary may delist clean-up debris and residues which are not regulated by EPA as hazardous wastes resulting from an emergency action in § 7-105, after considering the factors in § 7-216(c), without consulting the Commissioners of Health and Labor.

#### § 7-219 SAMPLING, ANALYTICAL AND TESTING METHODOLOGIES

- (a) The appropriate analytical and test methods to determine whether a representative sample exhibits a hazardous waste characteristic are specified in §§ 7-205 through 7-208.
- (b) The appropriate analytical procedures to determine whether a representative sample contains a given toxic constituent are specified in chapter two ("Choosing the Correct Procedure") of EPA Publication SW-846 ("Test Methods for Evaluating Solid Waste Physical/Chemical Methods"), as incorporated by reference in **subsection (d) of this section**. Prior to final sampling and analysis method selection, the individual should

consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

(c) Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed in **Appendix I to 40 CFR Part 261**, for sampling waste with properties similar to the indicated materials, will be considered by the Agency to be representative of the waste.

- (d) When used in 40 CFR Parts 260 through 270 or in these regulations, the publications listed in 40 CFR § 260.11 are hereby incorporated by reference.
- (e) Any person seeking to add a sampling, analytical or test method to the methods referenced by this section shall petition the Administrator of EPA in accordance with 40 CFR §§ 260.20 and 260.21.



# Subchapter 3: HAZARDOUS WASTE GENERATOR STANDARDS

# § 7-301 APPLICABILITY, PURPOSE, SCOPE

- (a) The requirements of this subchapter apply to all hazardous waste generators and:
  - (1) Any owner or operator of a treatment, storage or disposal facility who initiates a shipment of hazardous waste from such facility;
  - (2) Any owner or operator of a facility, or a generator, that accepts hazardous waste from very small quantity generators;
  - (3) Any transporter of hazardous waste who:
    - (A) Transports hazardous waste into the United States from abroad; or
    - (B) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container; and
  - (4) Any other person that is required to meet hazardous waste generator standards as specified elsewhere in these regulations.
- (b) Hazardous waste generators shall determine their generator category in accordance with § 7-305. Very small quantity generators, small quantity generators and large quantity generators of hazardous waste shall comply with the requirements applicable to their generator category as specified under §§ 7-306 through 7-308.
  - **Note:** A very small quantity generator may choose to comply with more stringent requirements applicable to small or large quantity generators, and a small quantity generator may choose to comply with more stringent requirements applicable to large quantity generators.
- (c) A generator that stores hazardous waste is subject to the applicable requirements of **Subchapter 5**, unless it is one of the following:
  - (1) A very small quantity generator that meets the requirements of § 7-306;
  - (2) A small quantity generator that meets the requirements of § 7-307; or
  - (3) A large quantity generator that meets the requirements of § 7-308.
- (d) Persons responding to an explosives or munitions emergency.
  - (1) Persons are not required to comply with the standards of this subchapter provided that they are responding to an explosives or munitions emergency:

- (A) That presents an immediate threat to human health, safety, property, or the environment from the known or suspected presence of military munitions, or other explosive materials or devices, as determined by an explosive or munitions emergency response specialist; or
- (B) When a federal, state or local official, acting within the scope of official responsibilities, or an emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters that do not have EPA identification numbers, and not subject to the manifest requirements of **subchapter 7** of these regulations.
- When a military response specialist responds to an emergency pursuant to **subsection** (d)(1)(B) of this section the specialist's organizational unit shall retain records for three years that identify the dates of the response, the persons responding, the type and description of material addressed, and that material's disposition.
- (3) 40 CFR § 266.205 identifies when the storage requirements, including the generator storage requirements of this subchapter, apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of subchapters 1 through 7 of these regulations.
- (e) All reverse distributors (as defined in § 7-1001) are subject to the requirements of **subchapter 10** for the management of hazardous waste pharmaceuticals in lieu of this subchapter.
- (f) Each healthcare facility (as defined in § 7-1001) must determine whether it is subject to subchapter 10 for the management of hazardous waste pharmaceuticals, based on the total hazardous waste it generates per calendar month (including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste). Very small quantity, small quantity and large quantity generators are subject to subchapter 10 as follows:
  - (1) A healthcare facility that is either a small quantity generator or a large quantity generator is subject to **subchapter 10** for the management of hazardous waste pharmaceuticals in lieu of this part subchapter.
  - (2) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to subchapter 10, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
- (g) Any person who exports or imports hazardous wastes must comply with § 7-304(b) and the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations).

### § 7-302 PROHIBITIONS

The following activities are prohibited:

- (a) Disposal of hazardous waste by evaporation.
- (b) Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to 40 CFR § 268.3 (incorporated by reference through § 7-106 of these regulations).
- (c) The release of hazardous material into the surface or groundwater, or onto the land of the state is prohibited pursuant to 10 V.S.A. § 6616.
- (d) The placement of hazardous waste in any landfill located in Vermont.
- (e) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill. Prior to disposal in a hazardous waste landfill, liquids must meet additional requirements as specified in 40 CFR §§ 264.314 and 265.314.

# § 7-303 HAZARDOUS WASTE DETERMINATION

Any person who generates a waste shall determine if that waste is a hazardous waste in accordance with § 7-202.

## § 7-304 NOTIFICATION, EPA IDENTIFICATION NUMBERS AND REGISTRATION

- (a) No generator shall treat, recycle, store, dispose of, transport, or offer for transportation, hazardous waste without having obtained a permanent EPA identification number by notifying the Secretary using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) in accordance with § 7-104. As specified under § 7-104, the Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event.
- (b) In accordance with § 7-104, a generator shall maintain an up-to-date Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) on file with the Secretary that accurately describes current waste activity and waste generation. In addition:
  - (1) A small quantity generator shall re-notify the Secretary starting in 2021 and every four years thereafter using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). This re-notification shall be submitted by September 1st of each year in which re-notifications are required.
  - (2) A large quantity generator shall re-notify the Secretary by March 1 of each even-

numbered year thereafter using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). A large quantity generator may submit this renotification as part of its Biennial Report required under § 7-708(a).

- (c) A recognized trader shall not arrange for import or export of hazardous waste without having received an EPA identification number from the Secretary.
- (d) When completing a manifest, a generator shall use the EPA identification number that is assigned to the generator site at the time of shipment.
- (e) All generators of hazardous waste shall register with the Secretary, renew the registration annually, and pay the hazardous waste generator registration fee specified in 3 V.S.A. § 2822. Initial registration shall be made by submitting a completed Hazardous Waste Handler Site Identification Form (EPA Form 8700-12)( see § 7-104(a)). Annual renewal of the registration shall be accomplished by payment of the registration fee.

#### § 7-305 GENERATOR CATEGORY DETERMINATION

A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in § 7-103.

- (a) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following:
  - (1) Counting the total amount of hazardous waste generated in the calendar month;
  - (2) Subtracting from the total any amounts of waste exempt from counting as described in subsections (c) and (d) of this section; and
  - (3) Determining the resulting generator category for the hazardous waste generated using **Table 1 of this section**.
- (b) A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing the following:
  - (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month;
  - (2) Subtracting from each total any amounts of waste exempt from counting as described in **subsections (c) and (d) of this section**;

- (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using **Table 1 of this section**; and
- (4) Comparing the resulting generator categories from **subsection** (b)(3) of this section and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

Table 1. Generator Categories Based on Quantity of Waste Generated in a Calendar Month

Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator category
> 1 kg (2.2 pounds)	Any amount	Any amount	Large quantity generator
Any amount	≥ 1,000 kg (2,200 pounds)	Any amount	Large quantity generator
Any amount	Any amount	> 100 kg (220 pounds)	Large quantity generator
≤ 1 kg (2.2 pounds)	> 100 kg (220 pounds) and < 1,000 kg (2,200 pounds)	≤ 100 kg (220 pounds)	Small quantity generator
≤ 1 kg (2.2 pounds)	≤ 100 kg (220 pounds)	≤ 100 kg (220 pounds)	Very small quantity generator

- (c) A generator who generates Vermont listed hazardous waste may average the amount of such waste generated over the six month period elapsed immediatly prior to making its generator status determination. The generator shall add that average amount to the amount of other non-acute hazardous waste generated in the calendar month when determining its generator category.
- (d) In determining the quantity of hazardous waste generated, a person shall count all hazardous wastes except:
  - (1) Wastes exempted from regulation under §§ 7-203 and 7-204;
  - (2) Hazardous waste when it is removed from on-site short-term storage so long as the hazardous waste was previously counted once;
  - (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been previously counted once;

- (4) Hazardous waste produced by on-site treatment, including reclamation, of hazardous waste, so long as the hazardous waste that is treated was previously counted once;
- (5) Used oil managed in accordance with the standards set forth under **subchapter 8** of these regulations;
- (6) Wastes managed in accordance with the universal waste standards set forth under **subchapter 9** of these regulations;
  - **Note:** As provided for by § 7-203(s), wastes managed according to the standards of subchapter 9 are exempt from regulation under subchapters 1 through 7 except as specified in subchapter 9.
- (7) Hazardous waste that is an unused commercial chemical product (listed in §§ 7-210 through7-215 or exhibiting one or more characteristics described in §§ 7-205 through7-208) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 40 CFR § 262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in § 7-103;
- (8) Hazardous waste that is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in § 7-103;
- (9) Hazardous waste that is managed as part of an episodic event in compliance with § 7-312; or
- (10) Hazardous waste that is a hazardous waste pharmaceutical, as defined in § 7-1001, that is subject to or managed in accordance with **subchapter 10** or is a hazardous waste pharmaceutical that is also a Drug Enforcement Administration controlled substance and is conditionally exempt under § 7-1007.
- (e) A generator is regulated as a very small quantity generator, small quantity generator, or large quantity generator based upon the types and quantities of hazardous waste produced or handled, and shall comply with the requirements applicable to its generator category.

## § 7-306 VERY SMALL QUANTITY GENERATOR

- (a) A generator is a very small quantity generator if that person generates less than:
  - (1) 220 pounds (100 kilograms) of hazardous waste in a calendar month; and
  - (2) 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month; and
  - (3) 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other

debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and

has accumulated less than 2,200 pounds (1000 kilograms) of hazardous waste, 2.2 pounds (one kilogram) of acutely hazardous waste, or 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste at any time.

- (b) If a very small quantity generator generates or accumulates hazardous wastes in amounts exceeding the limits specified in **subsection** (a) of this section, that generator shall become a small quantity generator or a large quantity generator as determined under § 7-305.
- (c) A very small quantity generator is exempt from the requirements of these regulations except as provided for in subsections (c)(1) through (4) of this section:
  - (1) A very small quantity generator must:
    - (A) Except for laboratories owned by an eligible academic entity as allowed under **subsection** (d) of this section, determine if waste generated is hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
    - (B) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with **§7-304**;
    - (C) Comply with the annual generator registration and fee requirements of § 7-304(e);
    - (D) Comply with the generator category determination requirements of § 7-305;
    - (E) Conduct hazardous waste management operations in a manner that minimizes the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water, which could threaten human health or the environment.
    - (F) Manage containers holding hazardous wastes in accordance with the container management standards of §§ 7-311(f)(2) through (4), and as follows:
      - (i) A container must be in good condition and chemically compatible with any waste stored therein;
      - (ii) A container must remain closed except to add or remove waste; and
      - (iii) Containers must be marked with the words "Hazardous Waste" and other words that identify the contents;

- (G) Store wastes in an area that meets the design standards of §§ 7-311(a)(1) through (3);
- (H) Manage tanks holding hazardous waste in accordance with the tank management requirements of 40 CFR § 265.201;
- (I) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105.
- (2) A very small quantity generator shall manage his or her own hazardous waste by ensuring delivery of such waste only to:
  - (A) An off-site hazardous waste treatment, storage or disposal facility which if located in the United States is permitted under 40 CFR Part 270, is in interim status under 40 CFR Parts 270 and 265, or is authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271;
  - (B) A certified solid waste management facility allowed to accept such waste under the terms of its certification;

**Note:** Waste that is identified as hazardous waste under these regulations, including that generated by very small quantity generators, is prohibited from disposal in all Vermont certified discrete disposal facilities (landfills).

**Note:** Hazardous waste may be sent by Vermont very small quantity generators to municipal solid waste landfills or to non-municipal non-hazardous waste landfills in other states only as authorized by 40 CFR §§262.14(a)(5)(iv) and (v).

- (C) A facility that beneficially uses or reuses or legitimately recycles or reclaims its waste or treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation;
- (D) An off-site small or large quantity generator located in Vermont that is under the control of the same person that is in control of the very small quantity generator site provided:
  - (i) The off-site generator meets the small quantity generator standards of § 7-307 or the large quantity generator standards of § 7-308, as appropriate;
  - (ii) The off-site generator has notified the Secretary that it is accepting hazardous waste from the very small quantity generator using the **Hazardous Waste**Handler Site Identification Form (EPA Form 8700-12);
  - (iii) The hazardous waste delivered to the off-site generator counts toward the generator category of the off-site generator; and

(iv) The very small quantity generator marks its container(s) of hazardous waste with the words "Hazardous Waste" and an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

"Control," for the purposes of this subsection, means the power to direct policies of the generator whether by ownership of stock, voting rights, or otherwise, except that contractors who operate on behalf of a different person as defined in § 7-103 shall not be deemed to "control" such generators.

- (E) A collection event authorized by the Secretary to accept very small quantity generator waste;
- (F) For wastes designated as universal waste, a universal waste handler or destination facility in accordance with the standards set forth in **subchapter 9**;
- (G) For airbag waste, an airbag waste collection facility or a designated facility subject to the requirements of § 7-203(y); or
- (H) A facility that otherwise treats, stores, or disposes of the waste provided the very small quantity generator has submitted a written request for an alternative handling method to the Secretary and received written approval from the Secretary stating that he or she has determined that the proposed handling method will not have an adverse impact on human health and the environment.
- (I) For pharmaceutical waste:
  - (i) A reverse distributor (as defined in § 7-1001), if the hazardous waste pharmaceutical is a potentially creditable hazardous waste pharmaceutical generated by a healthcare facility (as defined in § 7-1001).
  - (ii) A healthcare facility (as defined in § 7-1001) that meets the conditions in §§ 7-1003(l) and 7-1004(b), as applicable, to accept non-creditable hazardous waste pharmaceuticals and potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator.
- (3) A very small quantity generator may transport his or her own hazardous waste to a facility or an event described under § 7-306(c)(2) without complying with the transporter permitting requirements of subchapter 4 provided he or she complies with the requirements of § 7-105 (in the event of a release), with all applicable federal

- Department of Transportation (DOT) regulations, the regulations of states he or she transports waste through or delivers waste to, and any applicable Vermont Agency of Transportation regulations. A manifest is not required for such transport.
- (4) If a very small quantity generator chooses to utilize a manifest, he or she must comply with all applicable manifest instructions.
- (d) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of 40 CFR §§ 262.200 through 262.216 (Subpart K) are not subject to the requirements of subsection (c)(1)(A) of this section.
- (e) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with § 7-312.

#### § 7-307 SMALL QUANTITY GENERATOR

- (a) A small quantity generator may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of **subsection** (c) of this section and generates:
  - (1) Greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month;
  - (2) Less than 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month;
  - (3) Less than 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and
  - (4) The quantity of hazardous waste accumulated on-site never exceeds 13,200 pounds (6,000 kilograms).
- (b) If any person generates or accumulates hazardous wastes in amounts exceeding the limits specified in this section, that person becomes a large quantity generator and is subject to the requirements of § 7-308.
- (c) A small quantity generator must:
  - (1) Except for laboratories owned by an eligible academic entity as allowed under subsection (d) of this section, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
  - (2) Store hazardous waste on-site no longer than 180 days from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time

- limit is granted pursuant to § 7-311(c).
- **Note:** Hazardous waste may not otherwise be stored on-site for a period of time greater than 180 days without first obtaining certification under **subchapter 5**.
- (3) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with § **7-304**;
- (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions (incorporated by reference through § **7-106** of these regulations);
- (5) Comply with the annual generator registration and fee requirements of § 7-304(e);
- (6) Comply with the generator category determination requirements of § 7-305;
- (7) Comply with the general management standards of § 7-309;
- (8) Except for laboratories owned by an eligible academic entity as allowed under subsection (d) of this section, accumulate hazardous waste in accordance with § 7-310;
- (9) Comply with the short-term storage area standards of § 7-311;
- (10) Comply with the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- (11) Comply with the exception reporting requirements of § 7-707;
- (12) Comply with additional reporting, if required, under § 7-709;
- (13) Comply with the following emergency preparedness requirements for those areas of the facility where hazardous waste is generated and managed:
  - (A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the generator facility within a short period of time) with the responsibility for coordinating all applicable emergency response measures specified in **subsection (D) of this section**. This employee is the emergency coordinator.
  - (B) Post the following information next to telephones or in areas directly involved in the generation and short-term storage of hazardous waste:
    - (i) The name and emergency telephone numbers of the emergency coordinator(s);
    - (ii) Location of fire extinguishers and spill control material, and, if present, fire

alarm; and

- (iii) The telephone number of the fire department, unless the facility has a direct alarm.
- (C) Ensure that all employees are thoroughly familiar with evacuation signals and routes, and proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
- (D) The emergency coordinator must respond to any emergencies that arise. The applicable responses are as follows:
  - (i) In the event of a fire, call the fire department or, if appropriate, attempt to extinguish it using a fire extinguisher;
  - (ii) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105;
  - (iii) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800-424–8802). The report must include:
    - (aa) Name, address, and EPA identification number of the generator;
    - (bb) Date, time, and type of incident (e.g., spill or fire);
    - (cc) Quantity and type of hazardous waste involved in the incident;
    - (dd) Extent of injuries, if any; and
    - (ee) Estimated quantity and disposition of recovered materials, if any.
- (d) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of 40 CFR §§ 262.200 through 262.216 (Subpart K) are not subject to the requirements of subsections (c)(1) and (c)(8) of this section.
- (e) A small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with § 7-312.
- (f) A small quantity generators may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in § 7-103), without a storage permit or interim status and without complying with the requirements of **subchapter 5**, and the notification requirements of § 7-104, provided that they comply with the following conditions.

"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, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to "control" such generators.

- (1) The small quantity generator shall notify the Secretary in writing at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s); and
  - (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
  - (B) Submits an updated **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
- (2) The small quantity generator shall maintain records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.
- (3) The small quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the small quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the small quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the small quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e., placed in a short-term storage area).

#### § 7-308 LARGE QUANTITY GENERATOR

- (a) A large quantity generator may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of **subsection** (b) of this section and generates:
  - (1) That person generates 2,200 pounds (1,000 kilograms) or more of hazardous waste in a calendar month; or
  - (2) That person generates 2.2 pounds (1 kilogram) or more of acutely hazardous waste in a calendar month; or

- (3) That person generates 220 pounds (100 kilograms) or more of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; or
- (4) The quantity of hazardous waste accumulated on-site exceeds 13,200 pounds (6,000 kilograms) at any one time; or
- (5) The quantity of acutely hazardous waste accumulated on-site equals or exceeds 2.2 pounds (1 kilograms) at any one time; or
- (6) The quantity of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste, accumulated on-site equals or exceeds 220 pounds (100 kilograms) at any one time.
- (b) A large quantity generator must:
  - (1) Except for laboratories owned by an eligible academic entity as allowed under **subsection (c) of this section**, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinatins in accordance with the requirement of § 7-303;
  - (2) Store hazardous waste on-site no longer than 90 days, or 180 days for wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 and that are managed in accordance with the provisions of 40 CFR §§ 262.17(c) through (e), from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time limit is granted pursuant to § 7-311(c).

**Note:** Hazardous waste may not be stored on-site for a period of time that exceeds any of the above timeframes without first obtaining certification under **subchapter 5**.

- (3) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with § **7-304**;
- (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions incorporated by reference through § **7-106** of these regulations;
- (5) Comply with the annual generator registration and fee requirements of § 7-304(e);
- (6) Comply with the generator category determination requirements of § 7-305;
- (7) Comply with the general management standards of § 7-309;
- (8) Except for laboratories owned by an eligible academic entity as allowed under subsection (c) of this section, accumulate hazardous waste in accordance with § 7-

310;

- (9) Comply with the short-term storage area standards of § 7-311;
- (10) Comply with the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- (11) Comply with the exception reporting requirements of § 7-707;
- (12) Comply with the biennial reporting requirements of §§ 7-708(a) and (c);
- (13) Comply with additional reporting, if required, under § 7-709;
- (14) Comply with the following preparedness, prevention, and emergency procedure requirements:
  - (A) A large quantity generator must have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, ground water, or surface water. The plan must be carried out immediately whenever there is a fire, explosion or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The contingency plan must contain:
    - (i) A description of the actions facility personnel must take to comply with §§ 7-308(b)(14)(A) and 7-308(b)(14)(E) in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water at the facility.
    - (ii) If the generator has already prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements in this subchapter. The generator may develop one contingency plan that meets all regulatory standards.
      - **Note:** EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").
    - (iii) Arrangements agreed to with the local police departments, fire department, local hospitals, emergency response contractors, state and local emergency response teams, or, if applicable, the Local Emergency Planning Committee, to coordinate emergency services pursuant to § 7-309(a)(4).
    - (iv) An up-to-date list of names and emergency telephone numbers of all persons

qualified to act as emergency coordinator. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. In situations where the generator facility has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times.

- (v) An up-to-date list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. In addition, the plan must include the location, and a physical description of each item on the list, and a brief outline of its capabilities.
- (vi) An evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).
- (B) A large quantity generator must maintain copies of the contingency plan and all revisions to the plan at its facility and comply with the following:
  - (i) Submit a copy of the contingency plan and all revisions to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.
  - (ii) A large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at **subsection**(i) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:
    - (aa) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid);
    - (bb) The estimated maximum amount of each hazardous waste that may be present at any one time;
    - (cc) The identification of any hazardous wastes where exposure would require

- unique or special treatment by medical or hospital staff;
- (dd) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;
- (ee) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;
- (ff) The locations of water supply (e.g., fire hydrant and its flow rate);
- (gg) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and
- (hh) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.
- (iii) Update, if necessary, their quick reference guides, whenever the contingency plan is amended and submit these documents to the local emergency responders identified at **subsection** (i) of this section or, as appropriate, the Local Emergency Planning Committee.
- (C) The contingency plan must be reviewed and immediately amended by the large quantity generator whenever:
  - (i) Applicable regulations are revised;
  - (ii) The plan fails in an emergency;
  - (iii) The generator facility changes (i.e., in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
  - (iv) The list of emergency coordinators changes; or
  - (v) The list of emergency equipment changes.
- (D) At all times, there must be at least one employee either on the generator's premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures and implementing the necessary emergency procedures outlined in **subsection** (b)(14)(E) of this section. Although responsibilities may vary depending on factors such as type and variety of hazardous waste(s) handled

by the facility, as well as type and complexity of the facility, this emergency coordinator must be thoroughly familiar with all aspects of the generator's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous waste handled, the location of all records within the facility, and the facility's layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

# (E) Emergency Procedures

- (i) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his or her designee when the emergency coordinator is on call) must do the following immediately:
  - (aa) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
  - (bb) Notify appropriate state or local agencies with designated response roles if their help is needed;
- (ii) Whenever there is a release, fire, or explosion, the emergency coordinator shall perform the following concurrently:
  - (aa) Immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of the facility records or manifests and, if necessary, by chemical analysis.;
  - (bb) Assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).
- (iii) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, the emergency coordinator must report the findings as follows:
  - (aa) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and
  - (bb) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that

geographical area, or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

Name and telephone number of reporter;

Name and address of the generator;

Time and type of incident (e.g., release, fire);

Name and quantity of material(s) involved, to the extent known;

The extent of injuries, if any; and

The possible hazards to human health, or the environment, outside the facility.

- (iv) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the generator's facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released hazardous waste, and removing or isolating containers;
- (v) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;
- (vi) Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility. Unless the generator can demonstrate that the recovered material is not a hazardous waste, then it is a newly generated hazardous waste that must be managed in accordance with all the applicable requirements of these regulations.
- (vii) Ensure that in the affected area(s) of the facility, no hazardous waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed and all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- (viii) The generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the generator must submit a written report on the incident to the Secretary.

The report must include:

- (aa) Name, address and telephone number of the generator;
- (bb) Date, time and type of incident (e.g., fire, explosion);
- (cc) Name and quantity of material(s) involved;
- (dd) The extent of injuries, if any;
- (ee) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- (ff) Estimated quantity and disposition of recovered material that resulted from the incident.

#### (15) Personnel Training

- (A) Maintain a training program for facility personnel as described below:
  - (i) Facility personnel must successfully complete a program of classroom instruction, online training (e.g., computer-based or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with these regulations. The large quantity generator must ensure that this program includes all the elements described in the document required under subsection (b)(15)(D)(iii) of this section.
  - (ii) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
  - (iii) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including, where applicable:
    - (aa) Waste handling procedures;
    - (bb) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;
    - (cc) Key parameters for automatic waste feed cutoff systems;
    - (dd) Communications or alarm systems;

- (ee) Response to fires or explosions;
- (ff) Response to groundwater contamination incidents; and
- (gg) Shutdown of operations.
- (iv) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the large quantity generator is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all requirements of this section.
- (B) Facility personnel must successfully complete the program required in **subsection** (b)(15)(A) of this section within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees must not work in unsupervised positions until they have completed the training requirements of subsection (b)(15)(A) of this section.
- (C) At least once each calendar year, facility personnel must take part in a review of the initial training required under subsection (b)(15)(A) of this section.
- (D) The large quantity generator must maintain the following documents and records at the facility:
  - (i) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
  - (ii) A written job description for each position listed under **subsection** (b)(15)(D)(i) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of facility personnel assigned to each position;
  - (iii) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subsection (b)(15)(D)(i) of this section;
  - (iv) Records that document that the training or job experience, required under subsections (b)(15)(A) through (C) of this section, has been given to and completed by facility personnel; and

**Note:** Documentation of training is required for at least one employee per satellite accumulation area.

- (v) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.
- (16) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105.
- (17) Closure

When closing a short-term storage area (e.g., container storage area, tank, drip pad, containment building) at the facility (i.e., partial closure), and when closing the generator facility (i.e., final closure), a large quantity generator must implement closure in accordance with the following conditions, as applicable:

- (A) Closure performance standard. A large quantity generator must close the short-term storage area(s) and the generator facility in a manner that:
  - (i) Minimizes the need for further maintenance by controlling, minimizing or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the groundwater or surface waters or to the atmosphere; and
  - (ii) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from short-term storage areas including containment system components (e.g., pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste.
  - (iii) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in **subsection** (A)(ii) of **this section**, then the short-term storage area is considered to be a landfill and the generator must close the area and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (40 CFR § 265.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a area is then considered to be a landfill, and the generator must meet all of the requirements for landfills specified in **subchapter 5 of these regulations** and **subparts G and H of 40 CFR part 265**.
- (B) Pre-closure notification form.
  - (i) Partial closure. At least 30 days prior to commencement of partial closure

- activities, a large quantity generator must submit a completed **Pre-closure Notification Form** to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations.
- (ii) Final closure. At least 60 days prior to the commencement of final closure activities, a large quantity generator must submit a completed **Pre-closure**Notification Form to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations. On a case-by-case basis, the Secretary may approve a written request from a large quantity generator to submit a Pre-closure Notification Form less than 90 days prior to the commencement of final closure.
- (C) Closure plan. Based on the information provided in the **Pre-closure Notification Form**, or otherwise on a case-by-case basis, the Secretary may require a large quantity generator to submit a closure plan for review and approval by the Secretary. A closure plan shall be signed in accordance with signatory requirements of § 7-108 of these regulations and demonstrate how a large quantity generator will complete closure of the short-term storage area(s) or the facility by:
  - (i) Identifying all portions of the facility that will be subject to closure, including, if applicable:
    - (aa) Short-term storage area(s);
    - (bb) Equipment and structures to be removed and/or decontaminated during closure; and
    - (cc) Locations at the facility where discharges of hazardous waste or releases of hazardous materials are likely to be encountered during closure (e.g., soil beneath an indoor short-term storage area located on a cracked concrete slab);
  - (ii) Providing a schedule for all closure activities; and
  - (iii) Describing:
    - (aa) How each portion of the facility identified pursuant to **subsection** (C)(i) of **this section** will be closed in accordance with this section;
    - (bb) The methods for removing, transporting, treating, storing or disposing of all hazardous wastes including any hazardous waste generated in the process of closure;
    - (cc) The criteria for determining the extent of decontamination necessary to satisfy the closure performance standard of subsection (A) of this section

- (e.g., visual observation, analytical testing);
- (dd) The procedures for removing and/or decontaminating the portions of the facility undergoing closure;
- (ee) The sampling and analytical testing methods to evaluate effectiveness of decontamination procedures, and the methods for sampling and testing surrounding soils as appropriate; and
- (ff) Any other activities necessary to ensure compliance with the closure performance standard of **subsection** (A) of this section.
- (D) Closure requirements. Closure shall be performed in accordance with the following requirements, as applicable:
  - (i) All short-term storage areas subject to closure, and the facility (if subject to closure) shall be closed in accordance with the closure performance standard of subsection (A) of this section;
  - (ii) If a closure plan is required by the Secretary, closure activities shall be conducted in accordance with the closure plan as approved by the Secretary;
  - (iii) All containers, tanks, liners, bases, materials, equipment, structures, soils, and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility;
  - (iv) All tank systems shall be closed in accordance with the requirements of 40 CFR §§ 265.197;
  - (v) All hazardous waste, including any hazardous waste generated in the process of closure, shall be managed in accordance with these regulations;
  - (vi) All hazardous waste shall be removed to a designated facility in accordance with short-term storage timeframes and prior to the completion of closure; and
  - (vii) Actual or suspected releases of hazardous materials or discharges of hazardous wastes shall be reported and managed in accordance with § 7-105 (Emergency and Corrective Actions) of these regulations.
- (E) Notification and certification of closure completion.
  - (i) Within 90 days of completion of closure, submit a revised **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) to the Secretary that the closure performance standard of **subsection** (A) of this section has been met. If the large quantity generator cannot meet the closure performance standard of **subsection** (A) of this section, notify the Secretary using the

- Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it will close as a landfill under 40 CFR § 265.310 in the case of a container, tank or containment building unit(s), or for a facility with drip pads, notify using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it will close under the standards of 40 CFR § 265.445(b).
- (ii) On a case-by-case basis, the Secretary may also require certification by an independent professional engineer licensed in Vermont that closure has been completed in accordance with the requirements of this section. Such certification shall be signed in accordance with the requirements of § 7-108 of these regulations.
- (F) Any generator identified as a large quantity generator (i.e., submitted a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12)) for at least a continuous one-year period within the five-year period prior to closure is subject to the requirements of this section regardless of their generator category at the time of closure.
- (c) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of 40 CFR §§ 262.200 through 262.216 (Subpart K) are not subject to the requirements of subsections (b)(1) and (b)(8) of this section.
- (d) A large quantity generators may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in § 7-103), without a storage permit or interim status and without complying with the requirements of **subchapter 5**, and the notification requirements of § 7-104, provided that they comply with the following conditions.
  - "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, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to "control" such generators.
  - (1) The large quantity generator shall notify the Secretary at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12); and
    - (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
    - (B) Submits an updated **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
  - (2) The large quantity generator shall maintain records of shipments for three years from

the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.

(3) The large quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the large quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e., placed in a short-term storage area).

## § 7-309 GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

#### (a) Preparedness and Prevention

Small and large quantity generator facilities must be maintained and operated to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

## (1) Required equipment

All areas where hazardous waste is either generated or accumulated must be equipped with the following items (unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below):

- (A) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- (B) A device, such as a cellular telephone or hand-held two-way radio, immediately available at the scene of operations, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;
- (C) Portable fire extinguishers, fire control equipment (including special extinguishing equipment such as that using foam, inert gas or dry chemicals), spill control and decontamination equipment; and

(D) Water at adequate volume and pressure to supply water hose streams or foam producing equipment, or automatic sprinklers or water spray systems.

**Note**: Small and large quantity generators may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.

- (2) Testing and maintenance of equipment
  All communications or alarm systems, fire protection equipment, spill control
  equipment, and decontamination equipment, where required, must be tested and
  maintained as necessary to assure its proper operation in time of emergency.
- (3) Access to communications or alarm system
  - (A) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access (i.e., direct and unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under subsection (a)(1) of this section.
  - (B) In the event there is just one employee on the premises while the facility is operating, that employee must have immediate access (i.e., direct and unimpeded accesss) to a device, such as a cellular telephone (immediately available at the scene of operation) capable of summoning external emergency assistance, unless such a device is not required under subsection (a)(1) of this section.
- (4) Arrangements with local authorities
  - (A) Small and large quantity generators must attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements.
    - (i) A small or large quantity generator attempting to make arrangements with its local fire department must determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.
    - (ii) As part of this coordination, the small or large quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

- (iii) Where more than one police or fire department might respond to an emergency, the small or large quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority.
- (B) Small and large quantity generators shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation must include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.
- (C) A facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.
- (5) Small and large quantity generators must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
- (b) Offering Hazardous Waste for Transportation
  - (1) Before transporting hazardous waste or offering hazardous waste for transportation off-site, small and large quantity generators must:
    - (A) Package the waste in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 173, 178, and 179;
    - (B) Mark and label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172.
    - (C) For each container of 119 gallons or less used in such transportation, mark with the following words and information in accordance with the requirements of 49 CFR § 172.304:
      - (i) HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

(11)	Generator's Name and Address	
(iii)	Generator's EPA Identification Number	

(iv)	Manifest Tracking Number	
(v)	EPA Hazardous Waste Code(s)	

- (D) A generator may use a nationally recognized electronic system, such as bar coding, to identify the EPA Hazardous Waste Code(s), as required by **subsections** (1)(C)(v) and (1)(E) of this section.
- (E) Lab packs that will be incinerated in compliance with 40 CFR §268.42(c) are not required to be marked with EPA Hazardous Waste Code(s), however such lab packs shall be marked with the following codes, where applicable: D004, D005, D006, D007, D008, D010, and D011.
- (F) Placard or offer the initial transporter the appropriate placards according to federal Department of Transportation regulations for hazardous materials under 49 CFR Part 172, Subpart F.
- (2) Small and large quantity generators shall not offer hazardous waste, as defined in 40 CFR Part 261, to:
  - (A) Transporters or to treatment, storage, recycling, or disposal facilities that have not received an EPA identification number; or
  - (B) Transporters that do not possess a permit to transport hazardous waste in Vermont.
- (3) For any Vermont-listed hazardous waste, a small or large quantity generator shall not offer such waste to a transporter that does not possess a permit to transport hazardous waste in Vermont unless the Secretary has provided prior written authorization to do so after determining that the practice will not pose a threat to human health or the environment.
- (4) Small and large quantity generators shall not transport, offer for transport, or otherwise cause its hazardous waste, as defined in 40 CFR Part 261, to be sent to a facility that is not a designated facility, or not otherwise authorized by the Secretary to receive the generator's hazardous waste.
- (5) Small and large quantity generators shall not transport or offer for transport Vermont-listed hazardous waste to a facility that is not either:
  - (A) A designated facility; or
  - (B) A facility that is not a designated facility located in a state other than Vermont, provided the facility is authorized to receive such waste under applicable state and local laws, regulations and ordinances.
- (6) Except as provided in **subsection** (b)(7) of this section, small and large quantity

generators shall not transport or offer for transport a hazardous waste for off-site treatment, storage, recycling, disposal or use without completing the generator's portion of the hazardous waste manifest in accordance with the applicable requirements of **subchapter 7**, unless exempted from these requirements under § 7-608 (Recycle/Reuse).

**Note:** Outside of Vermont, the hazardous waste manifest may not serve to replace the shipping papers required by the U. S. Department of Transportation under **Subpart C of 49 CFR Part 172**, if the waste being shipped is Vermont-listed hazardous waste.

- (7) In lieu of using a manifest, small or large quantity generators shipping Vermont-listed hazardous waste to a facility other than a designated facility, as provided for under subsection (b)(5)(B) of this section, shall comply with the following:
  - (A) Maintain a record on-site of each shipment as follows:
    - (i) The record for each shipment must include the following information:
      - (aa) The name, address, and telephone number of the facility to which the waste was sent;
      - (bb) The name, address, and EPA identification number of the transporter that picked up the waste;
      - (cc) The type and quantity of waste shipped; and
      - (dd) The date of shipment.
    - (ii) The record for each shipment must be retained for three years.
  - (B) Submit to the Secretary, within 10 days of the date of shipment, a copy of the DOT shipping papers required by the U. S. Department of Transportation under **Subpart** C of 49 CFR Part 172 and the following information if it is not already addressed in the shipping papers:
    - (i) The name, address, and EPA identification number of the generator;
    - (ii) The type and quantity of waste shipped;
    - (iii) The Vermont hazardous waste identification code(s) for the waste shipped;
    - (iv) The name, address, and telephone number of the facility to which the waste was sent; and
    - (v) The treatment method to be used by the facility to which the waste was sent.

- (8) A small or large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of § 7-704(i) may accumulate the returned waste on-site in accordance with §§ 7-307(c)(4), (9), and (13) or §§ 7-308(b)(4), (9), (14), (15) and (16), depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the small or large quantity generator must:
  - (A) Sign **Item 18c** of the manifest, if the transporter returned the shipment using the original manifest; or
  - (B) Sign **Item 20** of the manifest, if the transporter returned the shipment using a new manifest.

#### § 7-310 ACCUMULATION OF HAZARDOUS WASTE

- (a) Satellite Accumulation of Hazardous Waste
  - (1) Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of liquid acute hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without obtaining certification as a storage facility provided that:
    - (A) The container is made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
    - (B) The container is in good condition. If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a short-term storage area operated in compliance with § 7-311.
    - (C) The container is located within a structure that sheds rain and snow and upon an impervious surface.
    - (D) The container holding the waste remains closed except:
      - (i) When adding, removing, or consolidating waste; or
      - (ii) When temporary venting of a container is necessary for the proper operation

of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

- (E) The container is marked or labeled with the following:
  - (i) The words "Hazardous Waste" and
  - (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- (F) The container is managed in accordance with the container management requirements of §§ 7-311(b)(3) and 7-311(f)(4).
- (G) When either acute hazardous waste or non-acute hazardous waste has accumulated in excess of the amounts listed in **subsection** (a) of this section, or a container holding a lesser amount of such waste becomes full, the generator shall:
  - (i) Mark the date on the container or container label; and
  - (ii) Within three consecutive calendar days of the date marked on the container or container label, move the container to a short-term storage area or an off-site designated facility.
- (H) During the three consecutive calendar days identified in subsection (G)(ii) of this section, for the period of time the container remains in the satellite accumulation area, the generator shall continue to comply with the §§ 7-311(b)(3) and 7-311(f)(4) container management requirements. Once placed in a short-term storage area, the container shall be managed in accordance with all applicable requirements of § 7-311.
- (2) Satellite accumulation areas operated by:
  - (A) Small quantity generators must meet the preparedness and prevention requirements of §§ 7-307(c)(13) and 7-309(a).
  - (B) Large quantity generators must meet the preparedness, prevention and emergency procedure requirements of §§ 7- 308(b)(14) and 7-309(a).
- (b) Accumulation of Hazardous Waste in a Short-Term Storage Area

Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of liquid acute hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste in containers in a short-term storage area without obtaining certification as a storage facility provided that:

- (1) The waste is brought directly from the point of generation to the short-term storage area by the end of each work shift (not to exceed 12 hours) under the following conditions:
  - (A) The waste has been collected in a shift accumulation container that is:
    - (i) Chemically compatible with any accumulated waste;
    - (ii) In good condition;
    - (iii) Kept closed except to add or remove waste; and
    - (iv) Marked or labeled with the words "hazardous waste" and other words that identify the contents of the container;
  - (B) The waste is brought directly to the short-term storage area by a trained employee; and
  - (C) No more than one shift accumulation container is in use per process line wastestream;
- (2) Any accumulation container maintained in the short-term storage area is:
  - (A) Managed in accordance with the short-term storage requirements of § 7-311 with the exception that the container need not be marked with the date that the container was first used to accumulate hazardous waste;
  - (B) Marked to indicate that it is an accumulation container, and provide information to describe the point of waste generation; and
  - (C) Marked to identify the date when one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of acutely hazardous waste, or 55 gallons of any other hazardous waste has been accumulated in the container, or when a container of smaller capacity becomes full.
- (c) Only one accumulation container per process line wastestream may be used at any one time. That is, a particular process line wastestream may be accumulated under the provisions of either subsection (a) of this section or subsection (b) of this section, but not both.

# § 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

- (a) Short-Term Storage Area Design Standards
  - (1) Generators must accumulate and store hazardous waste upon an impervious surface except for spill clean-up debris that is generated in response to an emergency action completed pursuant to § 7-105.
  - (2) Hazardous waste containers may be placed out-of-doors only if they are within a structure that sheds rain and snow.
  - (3) Hazardous wastes subject to freezing and expansion may not be stored in containers or aboveground tanks unless mechanical or physical means are employed to prevent freezing.
  - (4) The spill and fire control equipment required under §§ 7-309(a)(1)(A) and (C) shall be available in the immediate vicinity of each short-term storage area.
- (b) Short-Term Storage Area Operating Standards
  - (1) Containers or tanks holding hazardous wastes that are incompatible with hazardous wastes held in other containers or tanks must not be stored in the same enclosure, building or structure unless they are segregated in a manner that prevents the wastes from coming into contact with one another under any circumstances (such as spillage or simultaneous leakage).
  - (2) Containers of hazardous waste must be stored such that the hazardous waste labeling is visible.
  - (3) Aisle space between rows of containers must be sufficient to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide.

**Note:** Some local, state, and federal fire and safety codes and/or regulations require up to 36" of aisle space for the storage of flammable and combustible liquids.

(c) Short-Term Storage Time Limit Extensions

A small or large quantity generator may be granted up to a thirty (30) day extension of the short-term storage time limits specified in §§ 7-307(c)(2) and 7-308(b)(2), at the discretion of the Secretary, if hazardous waste must remain on-site due to unforeseen temporary and uncontrollable circumstances.

#### (d) Inventory and Inspection

(1) Inventory. Small and large quantity generators shall maintain, at a location apart from the short-term storage area, a list of all hazardous waste currently in storage. For generators storing hazardous waste in containers, the list shall identify each container being stored and the type of hazardous waste held by each container. Any hazardous waste being accumulated within a short-term storage area must be included on the list of hazardous waste in storage.

#### (2) Inspection

- (A) With the exception of generators who accumulate hazardous waste in a short-term storage area pursuant to 7-310(b), small and large quantity generators shall at a minimum conduct weekly inspections of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items to be inspected which shall include:
  - (i) Visual inspection of the short-term storage area for rusting, bulging, or leaking containers or tanks;
  - (ii) Inspection of all safety and emergency equipment required under § 7-311(a)(4);
  - (iii) Inspection of adequate aisle space (minimum of 24 inches as specified in § 7-311(b)(3)) between rows of containers;
  - (iv) Description of discrepancies or problem areas encountered in the inspection and the corrective actions taken; and
  - (v) The signature or initials of the inspector and the date of the inspection.

**Note**: Weelky inspections shall be conducted at least every seven (7) days.

(B) Small and large quantity generators who accumulate hazardous waste in short-term storage areas pursuant to 7-310(b) shall conduct daily inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items listed in subsections (A)(i) through (v) of this section.

**Note**: Regular business days are days when personnel are normally scheduled to be on site.

#### (e) Security

- (1) Small and large quantity generators must post a sign at each short-term hazardous waste storage area, which must be visible from at least 25 feet with the legend, "Danger-Hazardous Waste Storage Area-Authorized Personnel Only". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec. Existing signs with a similar legend may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the storage area, and that entry into the storage area can be dangerous.
- (2) Small and large quantity generators storing ignitable waste (flash point less than 140°F) must also post a sign at each short-term hazardous waste storage area, which must be visible from 25 feet with the legend, "No Smoking". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec.

#### (f) Use and Management of Containers

- (1) Containers used for the short-term storage of hazardous wastes shall be marked from the time they are first used to accumulate or store waste in a short-term storage area. Such marking shall be clearly visible for inspection on each container and include:
  - (A) The words "Hazardous Waste";
  - (B) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704); and;
  - (C) With the exception of accumulation containers managed in a short-term storage area in accordance with § 7-310(b), the date upon which the period of short-term storage begins.

**Note:** Containers used to store waste that is in the process of having a hazardous waste determination made, and for which the hazardous waste identification code(s) are not known, do not need to be marked to include the hazardous waste identification code(s). The hazardous waste identification code(s) must be marked on the container once the hazardous waste determination has been completed for the waste.

## (2) Condition of containers

If a container holding hazardous waste is not in good condition (e.g., damaged, bulging, leaking, or otherwise unsafe), or if it begins to leak, the owner or operator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the requirements of this section.

# (3) Compatibility of waste with container

The owner or operator must use a container made of or lined with materials that will not react with and are otherwise compatible with the hazardous waste to be held, so that the ability of the container to contain the waste is not impaired.

#### (4) Management of containers

- (A) A container holding hazardous waste must always be closed during storage except when it is necessary to add or remove waste;
- (B) A container holding hazardous waste must not be opened, handled or stored in a manner that may rupture the container or cause it to leak;

# (C) Incompatible wastes

- (i) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container. Examples of incompatible wastes are provided in **Appendix VII**.
- (ii) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material; and
- (iii) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

#### (5) Emissions from containers

A large quantity generator storing hazardous waste in containers must comply with the applicable requirements of 40 CFR Part 265 Subparts AA, BB, and CC.

#### (6) Containers holding ignitable or reactive waste

A large quantity generator accumulating or storing ignitable or reactive waste in containers must comply with the following:

- (A) Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation or short-term storage to occur within this restricted area. A record of the written approval must be maintained as long as ignitable or reactive hazardous waste is accumulated or stored in this area.
- (B) The large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.
- (g) Use and Management of Tanks
  - (1) Small and large quantity generators using tanks for the short-term storage of hazardous wastes shall:
    - (A) Mark or label its tanks with:
      - (i) The words "Hazardous Waste"; and
      - (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR § 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
    - (B) Demonstrate compliance with short-term storage time limits as follows:
      - (i) Small quantity generators shall use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 180 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 180 days of first entering;
      - (ii) Large quantity generators shall used inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90

days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and

- (C) Keep inventory logs or records with the above information on site and readily available for inspection
- (2) A small quantity generator storing hazardous wastes in tanks must comply with the general operating standards of 40 CFR § 262.16(b)(3).
- (3) A large quantity generator storing hazardous wastes in tanks must comply with:
  - (A) All secondary containment, monitoring, tank testing and other requirements of 40 CFR§§ 265.190 through 265.199, except §265.197(c); and
  - (B) 40 CFR Part 265 Subparts AA, BB and CC.
- (h) Use and Management of Drip Pads and Containment Buildings

Small and large quantity generators placing hazardous wastes on drip pads or in containment buildings must comply with the requirements of §§ 262.16(b)(4) and (5), and 262.17(a)(3) and (4) as applicable.

#### § 7-312 MANAGING HAZARDOUS WASTE FROM AN EPISODIC EVENT

- (a) A very small quantity generator or small quantity generator may maintain its existing generator category for hazardous waste generated during an episodic event provided that the generator complies with the following requirements:
  - (1) The very small quantity generator or small quantity generator is limited to one episodic event per calendar year, unless a petition is granted under **subsection** (b) of this section:
  - The very small quantity generator or small quantity generator must notify the Secretary no later than thirty (30) calendar days prior to initiating a planned episodic event using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). In the event of an unplanned episodic event, the generator must notify the Secretary within 72 hours of the unplanned event via phone, email, or fax, and subsequently submit a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). The generator shall include the start date and end date of the episodic event and the reason(s) for the event, types and estimated quantities of hazardous wastes expected to be generated as a result of the episodic event, and identify a facility contact and emergency coordinator with 24-hour telephone access to discuss the notification submittal or respond to an emergency;

- (3) The very small quantity generator or small quantity generator must have an EPA identification number or obtain an EPA identification number using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12);
- (4) Very small quantity generators and small quantity generators are prohibited from storing hazardous wastes generated from an episodic event waste on drip pads and in containment buildings. When storing hazardous waste generated from an episodic event in containers and tanks, the following requirements apply:
  - (A) Hazardous waste must be managed in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water.

## (B) Containers

- (i) Very small quantity generators and small quantity generators storing episodic hazardous waste in containers must mark or label its containers with the following:
  - (aa) The words "Episodic Hazardous Waste"; and
  - (bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704); and
  - (cc) The date upon which the episodic event began, clearly visible for inspection on each container.
- (ii) Very small quantity generators and small quantity generators must ensure that containers are in good condition, compatible with the hazardous waste stored therein, and kept closed except to add or remove waste in accordance with §§ 7-311(f)(2) through (4).
- (iii) Small quantity generators storing episodic hazardous waste in containers must meet the inspection requirements of § 7-311(d)(2).

#### (C) Tanks

(i) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must mark or label its tank with the following:

- (aa) The words "Episodic Hazardous Waste"; and
- (bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
- (ii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must use inventory logs, monitoring equipment or other records to identify the date upon which each period of accumulation begins and ends; and
- (iii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must keep inventory logs or records with the above information on site and available for inspection.
- (iv) Very small quantity generators storing episodic hazardous waste in tanks must ensure that such tanks are in good condition and compatible with the hazardous waste stored therein. Tanks must have procedures in place to prevent the overflow (e.g., be equipped with a means to stop inflow with systems such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously fed into the tank). Tanks must be inspected at least once each operating day to ensure all applicable discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems are in good working order and to ensure the tank is operated according to its design by reviewing the data gathered from monitoring equipment such as pressure and temperature gauges from the inspection.
- (v) Small quantity generators storing episodic hazardous waste in tanks must comply with the requirements of § 7-311(g)(2).
- (5) Within sixty (60) calendar days from the start of the episodic event:
  - (A) A very small quantity generator must send its hazardous waste generated from the episodic event to a designated facility. The very small quantity generator must comply with the hazardous waste manifest requirements of § 7-702 when it sends its episodic event hazardous waste off site to a designated facility.
  - (B) A small quantity generator must either treat hazardous waste generated from an episodic event on-site in accordance with the conditions of § 7-502(o), or manifest

and ship such hazardous waste off site to a designated facility.

- (6) Very small quantity generators and small quantity generators must maintain the following records for three (3) years from the end date of the episodic event:
  - (A) Beginning and end dates of the episodic event;
  - (B) A description of the episodic event;
  - (C) A description of the types and quantities of hazardous wastes generated during the event;
  - (D) A description of how the hazardous waste was managed as well as the name of the designated facility that received the hazardous waste;
  - (E) Name(s) of hazardous waste transporters; and
  - (F) An approval letter from the Secretary if the generator petitioned to conduct one additional episodic event per calendar year.
- (b) Petition to manage one additional episodic event per calendar year.
  - (1) A generator may petition the Secretary for a second episodic event in a calendar year without impacting its generator category under the following conditions:
    - (A) If a very small quantity generator or small quantity generator has already held a planned episodic event in a calendar year, the generator may petition the Secretary for an additional unplanned episodic event in that calendar year within 72 hours of the unplanned event.
    - (B) If a very small quantity generator or small quantity generator has already held an unplanned episodic event in a calendar year, the generator may petition the Secretary for an additional planned episodic event in that calendar year.
  - (2) The petition must include the following:
    - (A) The reason(s) why an additional episodic event is needed and the nature of the episodic event;
    - (B) The estimated amount of hazardous waste to be managed from the event;
    - (C) How the hazardous waste is to be managed;
    - (D) The estimated length of time needed to complete management of the hazardous waste generated from the episodic event (not to exceed 60 days); and

- (E) Information regarding the previous episodic event managed by the generator, including the nature of the event, whether it was a planned or unplanned event, and how the generator complied with the conditions.
- (3) The petition must be made to the Secretary in writing, either on paper or electronically.
- (4) The generator must retain written approval in its records for three (3) years from the date the episodic event ended.

## § 7-313 Additional Requirements

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human health or the environment.

## Subchapter 4: REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS WASTE

#### § 7-401 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for persons transporting hazardous waste within or through Vermont.
- (b) This subchapter applies to:
  - (1) Transportation of hazardous waste accepted from:
    - (A) Very small quantity generators when the total amount accepted from all such generators in any shipment (i.e., combined in any single load in transport) exceeds the accumulation amounts allowed under in § 7-306(a);
    - (B) Any small or large quantity generator; or
    - (C) Any owner or operator of a facility;
  - (2) Transportation of recyclable hazardous wastes unless exempted from some or all provisions under § 7-608;
  - (3) Transportation of used oil as specified under § 7-811; and
  - (4) Any owner or operator of a transfer facility.
- (c) This subchapter does not apply to:
  - (1) Transportation of hazardous waste and used oil by generators within the site where the hazardous waste or used oil is generated;
  - (2) Transportation of hazardous waste within the site of a certified treatment, storage or disposal facility by the owner or operator of the facility;
  - (3) Self-transportation of hazardous waste by very small quantity generators, in accordance with § 7-306(c)(3);
  - (4) Transportation of used oil by do-it-yourselfers, and used oil generators self-transporting up to 55 gallons of used oil, in accordance with § 7-807(d);
  - (5) Transportation of universal waste conducted in accordance with the universal waste management standards of **subchapter 9**;
  - (6) Transportation during an emergency response to a release, in accordance with § 7-105(e)(1); and

- (7) Transportation during an explosives or munitions emergency response, conducted in accordance with §§ 7-105(e)(2) and 7-502(p).
- (d) Standards applicable to transportation of military munitions are specified under 40 CFR § 266.203.
- (e) A transporter of hazardous waste shall comply with all applicable requirements of 49 CFR Parts 171 through 180.

## § 7-402 APPLICABILITY OF OTHER SUBCHAPTERS

- (a) A transporter of hazardous waste must comply with the generator requirements of **subchapter 3** if he or she:
  - (1) Transports hazardous waste into the United States from abroad; or
  - (2) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container.
- (b) A transporter of hazardous waste that is being imported from or exported to any other country for purposes of recovery or disposal is subject to the applicable requirements of **Subpart H of 40 CFR Part 262**, including, but not limited to, **40 CFR § 262.83(d) and § 262.84(d)** for movement documents.
- (c) A transporter of hazardous waste shall comply with the applicable manifest, export and import, and reporting requirements of **subchapter 7**.
- (d) In the event of a release or discharge of hazardous waste during transport, a transporter shall comply with the emergency action requirements of § 7-105.

## § 7-403 RESERVED

## § 7-404 Transfer Facility Standards

- (a) Any transporter who owns or operates a transfer facility located in Vermont must:
  - (1) Obtain an EPA identification number for the facility and maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) in accordance with § 7-104.

**Note:** Written approval of the Secretary will not be granted for a transfer facility until a complete **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) is submitted for the facility.

- (2) Ensure that all shipments of hazardous waste to the transfer facility comply with the applicable manifest requirements of **subchapter 7**.
- (3) Hold hazardous waste at the transfer facility for a period of ten (10) days or less.
- (4) Ensure that all hazardous waste managed at the transfer facility is packaged, labeled, and marked in accordance with 49 CFR Parts 172, 173, 178, and 179.
- When consolidating the contents of two or more containers with the same hazardous waste into a new container, or when combining and consolidating two different hazardous wastes that are compatible with each other, the transporter must mark its containers of 119 gallons or less with the following information:
  - (A) The words "Hazardous Waste" and
  - (B) The applicable EPA hazardous waste code(s) in **subchapter 2**, or in compliance with § 7-309(b)(1).
- (6) Comply with the personnel training requirement of § 7-308(b)(15).
- (b) A transporter who stores manifested shipments of hazardous waste in containers meeting the packaging requirements of § 7-309(b)(1)(A) at a transfer facility for a period of ten (10) days or less is not subject to regulation under subchapter 5 or 40 CFR Part 268 with respect to the storage of those wastes.
- (c) If containers of hazardous waste are off-loaded from a transport vehicle for temporary storage (10 days or less) at a transfer facility, the transporter must ensure that:
  - (1) Prior to commencing container off-loading operations for the first time at a transfer facility, the owner or operator submits a written request to, and receives written approval from, the Secretary to conduct such operations. The request for approval shall describe how the requirements of this subsection will be met;

**Note:** If the Secretary determines that the operations of a transfer facility are taking place in a manner that circumvents the requirements of this section the Secretary may require changes to the facility operations or require the activity cease.

- (2) The containers remain closed and be stored:
  - (A) In a manner to prevent leakage or rupture;
  - (B) Upon an impervious surface;
  - (C) In a manner where the hazardous waste labeling is visible;

- (D) With a minimum of 24-inch wide aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation;
- (E) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
- (F) Within a structure that sheds rain and snow;
- (G) If the waste is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing; and
- (H) If wastes are incompatible with any waste or other materials stored nearby in other containers, in separate enclosures, buildings or structures unless the wastes are separated by means of a dike, berm, wall, or other device capable of preventing the wastes from coming in contact with one another under any circumstances (such as spillage or simultaneous leakage).
- (3) The owner or operator of the transfer facility maintains a written operating log that tracks all hazardous waste managed at the transfer facility by date of receipt, date of shipment off-site, and manifest tracking number, if applicable;
- (4) The owner or operator of the transfer facility maintains a written contingency plan for the facility as described in § 7-308(b)(14)(A);
- (5) The owner or operator of the transfer facility complies with the closure requirements of § 7-308(b)(17); and
- (6) The owner or operator of the transfer facility maintains a written closure cost estimate, in current dollars, of the cost of closing the facility in accordance with the standards of § 7-309(c) and 40 CFR § 265.142. This estimate must be adjusted annually for inflation, changes in operations, and changes in site conditions. The estimate must represent a worst-case scenario for closure. Proof of financial responsibility adequate to cover all costs of closure must be maintained until closure is complete. The financial responsibility mechanism must comply with the requirements of 40 CFR § 265.143. Proof of financial responsibility must be submitted by April 30<sup>th</sup> of each year.

#### § 7-405 PROHIBITIONS

No transporter subject to this subchapter shall:

(a) Remove hazardous waste from the container in which it was placed once it has been manifested and moved from the site of generation until it is accepted at the designated

# facility except:

- (1) Under the emergency provisions of § 7-105; or
- (2) For wastes of like DOT shipping descriptions, at a transfer facility with written consent of the generator.
- (b) Transport or accept for transport hazardous wastes which are unlabeled or which are in damaged, bulging, leaking, unsuitable or otherwise unsafe containers; or
- (c) Transport or accept for transport hazardous wastes which are incompatible with each other such that a danger to public health or safety or the environment could result from their being transported together.
- (d) Accept hazardous waste from a small or large quantity generator unless it is accompanied by a manifest signed in accordance with the provisions of § 7-702. In the case of exports:
  - (1) A transporter may not accept such waste from a primary exporter or other person if the transporter knows or has reason to know the shipment does not conform to the EPA Acknowledgment of Consent; and
  - (2) A transporter may not accept such waste from a primary exporter or other person unless, in addition to a manifest signed in accordance with the provisions of § 7-702, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).
- (e) Dilute any hazardous waste subject to the land disposal restrictions of **40 CFR Part 268**, as prohibited under **40 CFR § 268.3** (incorporated by reference through § 7-106 of these regulations).
- (f) Release hazardous material into the surface or groundwater, or onto the land of the state in violation of 10 V.S.A. § 6616.

## § 7-406 WASTE TRANSPORTATION PERMIT

- (a) With the exception of those persons and activities specified under § 7-401(c), no person shall transport any hazardous waste or used oil within Vermont without first obtaining a permit to do so from the Secretary, as required under 10 V.S.A. § 6607a.
- (b) Any transporter who is required to obtain a permit shall complete, sign, and submit a **Vermont Waste Transporter Vehicle Report Form** and a **Supplemental Application for Hazardous Waste Transporters** to the Secretary.

#### (c) Disclosure statement

- (1) With the exception of those persons exempted under 10 V.S.A. § 6605f(k), any transporter who is required to obtain a permit under this section shall, pursuant to the requirements of 10 V.S.A. § 6605f, complete, sign, and submit to the Secretary at the time of application a Business Disclosure Statement, and a Personal History Disclosure statement for each person identified in the Business Disclosure Statement as a sole proprietor or key employee. In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of 10 V.S.A. § 6605f(e). The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership.
- Annual Statement within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.
- (d) Any transporter who is required to obtain a permit under this section shall:
  - (1) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) filed with the Secretary as required in § 7-104;
  - (2) Obtain an EPA identification number either from the Secretary by applying on the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), or from the state in which the transporter's base of operations is located;
  - (3) Maintain liability insurance for sudden accidental occurrences as specified in § 7-410; and
  - (4) Conduct a personnel training program for all employees handling either hazardous waste or used oil as specified in § 7-409.
- (e) Waste transportation permits shall have a duration of five years.

## § 7-407 Modification, Suspension, Revocation, or Denial of a Permit

- (a) The Secretary may modify any transporter permit upon his or her own motion or upon the receipt of a written request for modification that contains facts and reasons supporting the request. If the Secretary determines that modification is appropriate, only the conditions subject to modification are reopened. Cause for modification of a transporter's permit is:
  - (1) Material alterations to the transporter's activities which occurred after issuance of the permit to the transporter which justify the application of permit conditions that are

- different or absent from the existing permit;
- (2) The receipt of information concerning the transporter which was not available when the permit was issued; or
- (3) A change in the standards or regulations on which the permit was based, by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (b) The Secretary may suspend or revoke any transporter permit or deny any application for a transporter permit upon his or her own motion or upon receipt of a written request for suspension, revocation, or denial which contains facts and reasons supporting the request. Cause for suspension, revocation or denial is:
  - (1) Non-compliance by the transporter with the requirements of **10 V.S.A.**, **chapter 159**, these regulations, the regulations promulgated by the Vermont Agency of Transportation for the transportation of hazardous wastes, or any term or condition of a permit, order, or assurance;
  - (2) Failure by the transporter to disclose all relevant facts during the permit application process that were known at that time;
  - (3) A determination by the Secretary that:
    - (A) Any of the grounds for denial of a permit under 10 V.S.A. § 6605f(a) either existed at the time of application or have arisen since that time; or
    - (B) The holder of the permit, or the applicant for the permit, knowingly omitted or falsified information required to be disclosed under § 7-406(c).
  - (4) Misrepresentation of any relevant fact at any time;
  - (5) A felony conviction of the transporter in any jurisdiction when the conviction concerns violations of hazardous waste statutes or regulations; or
  - (6) A determination by the Secretary that the transporter's activities constitute a serious threat to human health or the environment and that such threat can only be regulated to acceptable levels by suspension, revocation or denial of the permit.
- (c) The Secretary shall provide written notice of modification, suspension, revocation, or denial, including the reasons for such actions, to the transporter involved. Any transporter who receives such notification shall have thirty days from the receipt of the notice to submit a written request for a hearing to the Secretary. If requested, the Secretary shall provide an opportunity for a hearing. The submission of a request for a hearing does not stay the effective date of the Secretary's decision.

(d) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a permit.

### § 7-408 ACCEPTING SHIPMENTS OF HAZARDOUS WASTE

A transporter may accept hazardous waste only from the following:

- (a) A generator who has an EPA identification number issued by the Secretary;
- (b) Another transporter who at the time has a valid transporter permit from the Secretary;

# § 7-409 Personnel Training

- (a) Permitted hazardous waste and used oil transporters must provide employee training to all persons who in the course of employment directly affect hazardous waste transportation safety. The training program shall be consistent with DOT employee training requirements of **49 CFR § 172.700**. Such training, at a minimum, shall include:
  - (1) For hazardous waste transporters:
    - (A) DOT's labeling, packing, placarding and shipping requirements as set forth in 49 CFR Parts 171 through 179 and all other applicable DOT regulations;
    - (B) Familiarity with and use of the most recent edition of the North American Emergency Response Guidebook for hazardous materials published by the DOT;
  - (2) For hazardous waste and used oil transporters:
    - (A) Safe vehicle operations to avoid creating hazards to public health, safety, or welfare or the environment;
    - (B) Safe handling of hazardous waste and used oil; and
    - (C) Emergency handling procedures in the event of a release or discharge of hazardous waste or used oil during transportation.
- (b) For each person required to be trained pursuant to **subsection** (a) of this section, a record of current training inclusive of the preceding three (3) years shall be kept on file by the transporter while these individuals are employed by the transporter, and for 90 days after these individuals cease being employed by the transporter. This period shall be extended automatically for the duration of any unresolved enforcement action, or as ordered by the Secretary. These records shall include the following:
  - (1) Name of employee;

- (2) Date of most recent training;
- (3) Description of training materials;
- (4) Name and address of person providing training; and
- (5) Certification that the employee has been trained and tested.

Note: It is recommended that each person required to be trained pursuant to subsection (a) of this section have knowledge of the Vermont Hazardous Waste Management Regulations, in particular: subchapter 4 (requirements for transporters of hazardous waste), § 7-105 (emergency and corrective actions), § 7-211 (Vermont listed hazardous wastes), and subchapter 7 (manifest, reporting and recordkeeping requirements).

# § 7-410 LIABILITY INSURANCE REQUIREMENTS

- (a) All permitted hazardous waste transporters shall carry liability insurance, as required by U.S. DOT regulations, for sudden and accidental occurrences, exclusive of legal defense costs, for claims arising out of bodily injury and property damage from the hazardous waste transport operations of the transporter. Such insurance policy shall carry an approved DOT endorsement (Form MCS 90 DOT) covering liability for accidents, including environmental restoration, bodily injury, and property damage.
- (b) The insurance policy shall be maintained in full force at all times during the term of the permit.

## § 7-411 EMERGENCY PREPAREDNESS

No transporter shall transport hazardous waste in Vermont without being in possession of the following on each vehicle:

- (a) Telephone numbers of:
  - (1) The generator of the waste being transported; and
  - (2) The Vermont Agency of Natural Resources and the telephone numbers specified in § 7-105.
- (b) A copy of the most recent edition of the North American Emergency Response Guidebook for hazardous materials published by DOT.
- (c) All of the following equipment in good operating condition:

- (1) A first aid kit with eyewash;
- (2) An Underwriters' Laboratory listed explosion proof flashlight; and
- (3) A fire extinguisher of appropriate size and type for the vehicle and wastes carried.



# Subchapter 5: REQUIREMENTS FOR HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

## § 7-501 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for the design, construction, operation, and maintenance of hazardous waste treatment, storage, and disposal facilities. This subchapter also describes the procedures for certification of hazardous waste facilities.
- (b) The requirements of this subchapter apply to owners and operators of hazardous waste facilities including all facilities which treat, store, or dispose of hazardous wastes referred to in 40 CFR Part 268 (incorporated by reference through § 7-106).
- (c) The requirements of this subchapter apply to any person who accepts, treats, stores, or disposes of hazardous waste unless the person or activity is exempted under § 7-502.
- (d) 40 CFR § 266.205 identifies when storage requirements, as incorporated by reference through § 7-504(e)(1), apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of subchapters 1 through 7 of these regulations.

# § 7-502 EXEMPTIONS

The following facilities and activities are exempted from the provisions of this subchapter:

- (a) A resource recovery facility managing municipal solid waste provided:
  - (1) The facility receives and burns only household waste, and solid waste from commercial or industrial sources which does not contain hazardous wastes; and
  - (2) The facility does not accept hazardous wastes, and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (b) A totally enclosed treatment facility. A totally enclosed treatment facility is a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of hazardous waste or any constituent thereof into the environment during treatment.
- (c) The owner or operator of an elementary neutralization unit or wastewater treatment unit as defined in § 7-103 provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 CFR § 268.40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to

- remove the characteristic before land disposal, the owner/operator must comply with the general requirements for ignitable, reactive, or incompatible wastes set out in 40 CFR § 264.17(b).
- (d) Any person engaged in treatment or containment activities performed during and as a result of an emergency response to a release of hazardous material, provided that the person:
  - (1) Complies with all applicable provisions of § 7-105; and
  - (2) Obtains certification under this subchapter when he or she continues or initiates treatment or containment activities after the emergency response is over.
- (e) The treatment of hazardous waste by mixing absorbent material with containerized hazardous waste provided:
  - (1) The mixing occurs when the waste is first placed in the container; and
  - (2) The person treating the waste complies with 40 CFR §§ 264.17(b), 264.171, and 264.172.
- (f) A solid waste management facility that accepts hazardous waste only from very small quantity generators provided the facility is certified by the Secretary to accept such waste.
- (g) Generators who store hazardous waste on-site in compliance with the requirements of §§7-306, 7-307, 7-308 and 7-310.
- (h) Farmers who dispose of hazardous waste pesticides from their own use as provided in § 7-203(r) of these regulations.
- (i) Transporters storing manifested shipments of hazardous waste at a transfer facility for a period of ten days or less and in accordance with § 7-404.
- (j) Universal waste handlers and universal waste transporters managing the wastes listed below. Universal waste handlers and universal waste transporters are subject to regulation under **subchapter 9** of these regulations.
  - (1) Batteries as described in § 7-902;
  - (2) Pesticides as described in § 7-903;
  - (3) Thermostats as described in § 7-904;
  - (4) PCB-containing fluorescent light ballasts as described in § 7-905;
  - (5) Lamps as described in § 7-906;

- (6) Mercury-containing devices as described in § 7-907;
- (7) Cathode ray tubes (CRTs) as described in § 7-908;
- (8) Postconsumer paint as described in § 7-909; and
- (9) Aerosol cans as described in § 7-910.
- (k) Facilities that recycle hazardous waste in accordance with the standards of **subchapter 6** and as follows:
  - (1) Facilities that recycle hazardous waste on-site provided:
    - (A) Any hazardous waste being recycled is generated on-site;
    - (B) The hazardous waste to be recycled is not held in short-term storage for longer than the amount of time allowed under **subchapter 3** of these regulations for the facility's generator category; and
    - (C) The facility owner or operator complies with the applicable requirements of § 7-502(o).
  - (2) Facilities that recycle hazardous waste received from off-site provided the hazardous waste is not stored prior to being recycled. Hazardous waste that is being staged at a recycling facility is not considered to be in storage.

**Note:** Recycling facilities that store hazardous wasteprior to recycling that waste, or that otherwise treats, stores or disposes of hazardous waste are subject to certification under this subchapter.

**Note:** Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (l) Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in § 7-1001. Reverse distributors are subject to regulation under **Subchapter 10** of these regulations in lieu of this part for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
- (m) Oil-water separators provided:
  - (1) The waste oil-water mixture to be separated is identified only by the VT02 hazardous waste code; and

- (2) Any contaminated water resulting from the separation process is discharged in accordance with 10 V.S.A. chapter 47 (for indirect injection well, and direct discharges) and chapter 48 (for groundwater protection); and
- (3) The oily residue resulting from the separation process is managed either as hazardous waste or in accordance with the used oil management standards of **subchapter 8**.
- (n) Facilities conducting site investigation and/or corrective action pursuant to § 7-105(f) of these regulations may be exempted by the Secretary from the permitting (but not the substantive) requirements of this subchapter, to the extent allowed under federal regulations incorporated by reference in this chapter.
- (o) Treatment of hazardous waste in containers or tanks by generators provided:
  - (1) The generator submits the following information in writing to the Secretary for written approval:
    - (A) The facility name, EPA identification number, generator category classification, mailing address, street address, telephone number, contact person, legal owner or operator;
    - (B) A detailed description of the treatment process(es) to be used including process design drawings, plans or process flow diagrams;
    - (C) An estimate of the frequency that treatment will occur;
    - (D) The type(s) and estimated quantity of hazardous waste to be treated including a detailed description of the process(es) generating the waste; and
    - (E) A detailed description of how all treatment products and by-products will be managed following treatment.

**Note:** The Secretary reserves the right, upon receiving written notification of treatment by a generator, to require that treatment-specific requirements be met.

- (2) The Secretary is notified in writing if the information required under subsection (o)(1) of this section changes significantly.
- (3) The hazardous waste being treated is generated and treated on-site.
- (4) During treatment and during any storage prior to treatment, hazardous waste is:
  - (A) Counted for the purpose of determining generator category under § 7-305; and
  - (B) Managed in accordance with the applicable requirements of **subchapter 3**.

- (5) The generator determines if treatment by-products are hazardous waste in accordance with § 7-303.
- (6) The generator maintains records for three years documenting:
  - (A) Copies of the written information submitted to the Secretary pursuant to **subsection (1) of this section**, and the written approval received from the Secretary.
  - (B) The type(s) and quantity of waste treated;
  - (C) The method(s) of treatment used; and
  - (D) The date(s) that treatment occurred.
- (7) All hazardous waste generated from the treatment is managed in accordance with the applicable standards of subchapter 3.
- (8) If a generator is treating wastewater using a wastewater evaporation unit, the generator must:
  - (A) Ensure that treatment in the evaporation unit shall result in the concentration of hazardous waste constituents for proper recycling or disposal, and not allow evaporation of the hazardous waste constituents into the air. Air emissions of hazardous constituents shall be controlled through compliance with all applicable air emission control requirements under the Clean Air Act, U.S. Code, Title 42, c. 85 as administered by USEPA, the emission thresholds established under § 5-261 (control of hazardous air contaminants) of the Vermont Air Pollution Control Regulations and, for large quantity generators, with the air emission control requirements in 40 CFR Part 265, subparts AA, BB and CC as applicable; and
  - (B) Ensure that operation of the evaporation unit or placement of hazardous waste within the unit does not:
    - (i) Result in the generation of extreme heat or pressure, fire or explosion, or violent reaction;
    - (ii) Produce uncontrolled toxic mists, fumes, or gases in sufficient quantities to threaten human health:
    - (iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion; or
    - (iv) Damage the structural integrity of the unit, or cause the unit or any of its ancillary equipment to rupture, leak, abnormally corrode, or otherwise fail before the end of its intended life.

(C) Ensure that oily residue resulting from the evaporation of water from hazardous waste identified only by the VT02 or VT03 hazardous waste codes is managed as either hazardous waste or in accordance with the Used Oil Management Standards of **subchapter 8**.

**Note:** Disposal of hazardous waste by evaporation is prohibited pursuant to § 7-302(a).

- (9) If a generator is managing and treating waste or contaminated soil in tanks or containers to meet Land Disposal Restriction treatment standards found at 40 CFR § 268.40, the generator develops and follows a written waste analysis plan in accordance with the requirements of 40 CFR § 268.7(a)(5).
- (10) The generator does not treat hazardous waste using thermal treatment processes.

**Note:** Distillation and use of a wastewater evaporation unit pursuant to **subsection (8) of this section** are not considered thermal treatment processes.

- (11) The generator does not treat mercury-containing wastes or devices (e.g., fluorescent lamps, thermostats).
- (12) Treatment does not result in any adverse impact to human health or the environment.

**Note:** Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (p) A person engaged in treatment or containment activities during immediate response to an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in § 7-103 of these regulations. An owner or operator of a facility otherwise regulated by this subchapter must comply with all applicable requirements of 40 CFR Part 264 subparts C and D. In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
- (q) A facility that meets either small or large quantity generator standards and that accepts hazardous waste from a very small quantity generator pursuant to § 7-306(c)(2)(D).

#### § 7-503 EMERGENCY CERTIFICATION

(a) Notwithstanding any other section of these regulations, in the event the Secretary finds an

imminent and substantial endangerment to human health or the environment, the Secretary may issue a temporary emergency certification to an uncertified facility to allow the treatment, storage, or disposal of hazardous waste or to a certified facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective certification.

- (b) This emergency certification:
  - (1) May be oral or written. If oral, it shall be followed in five days by a written emergency certification;
  - (2) Shall not exceed 90 days in duration;
  - (3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;
  - (4) May be terminated by the Secretary at any time without process if he or she determines that termination is appropriate to protect human health and the environment;
  - (5) Shall be accompanied by a public notice published under 40 CFR § 124.10(b) including:
    - (A) Name and address of the office granting the emergency authorization;
    - (B) Name and location of the facility;
    - (C) A brief description of the waste involved;
    - (D) A brief description of the action authorized and reasons for authorizing it; and
    - (E) The duration of the emergency certificate.
  - (6) Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of these regulations.

## § 7-504 GENERAL FACILITY CERTIFICATION STANDARDS

(a) Except for the facilities and activities excluded under § 7-502, certification from the Secretary is required to treat, store, dispose, or accept any hazardous waste as identified or listed under **subchapter 2** of these regulations.

**Note:** The terms "treatment", "storage", "disposal", and "hazardous waste" are defined in § 7-103.

#### (b) Certificate of Need

- (1) Except as provided for in **subsection (b)(2) of this section**, no person shall begin site preparation for or construction of a hazardous waste management facility for the purpose of treatment or disposal of hazardous waste, without first obtaining a certificate of need pursuant to the requirements of **10 V.S.A. § 6606a**.
- (2) The certificate of need requirement does not apply to:
  - (A) The replacement of an existing facility at the original site with an equivalent facility in the usual course of business; or
  - (B) A hazardous waste management facility that is operated only by or on behalf of the owner of the facility for the treatment or disposal of hazardous waste generated in Vermont by the owner of the facility. Such facility shall be located on a site of generation.
- (3) To determine that a proposed facility is needed for the general good of the state, the Secretary must find that:
  - (A) The proposed facility is consistent with any applicable provisions of the state hazardous waste management plan, if such plan has been adopted by the Secretary, or, if such plan has not been adopted by the Secretary, the proposed facility is consistent with the general goals and priorities of 10 V.S.A. chapter 159 as determined by the Secretary; and
  - (B) The proposed facility location:
    - (i) Is suitable for the type and amount of hazardous waste intended for treatment or disposal at the facility; and
    - (ii) Is accessible by transportation routes that minimize the threat to the public health and safety and to the environment; and
    - (iii) Reasonably accommodates the plans and preferences of the proposed host municipality, as expressed by local government entities; and
  - (C) The need for the facility is demonstrated by the need to assure the environmentally sound treatment or disposal of hazardous waste generated within Vermont, recognizing the effects of any state hazardous waste plan and:
    - (i) The further need to meet Vermont's obligations under an interstate agreement or regional compact; or
    - (ii) The lack of adequate current or projected treatment or disposal capacity within the region to handle the hazardous waste generated by Vermont

generators which is proposed for the facility.

## (c) Disclosure Statement

- (1) With the exception of those persons exempted under 10 V.S.A. § 6605f(k), any person who is required to obtain a certification under this subchapter shall, pursuant to the requirements of 10 V.S.A. § 6605f, complete, sign, and submit to the Secretary at the time of application a Business Disclosure Statement, and a Personal History Disclosure statement for each person identified in the Business Disclosure Statement as a sole proprietor or key employee. In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of 10 V.S.A. § 6605f(e). The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership
- Annual Statement within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.
- (d) No person shall initiate construction of a hazardous waste treatment, storage, or disposal facility without first applying for and receiving certification for such facility in accordance with §§ 7-505 and 7-506 of these regulations. In addition, any hazardous waste treatment, storage or disposal facility that was in existence on November 19, 1980, or any facility that treats, stores or disposes of a material that has been newly defined or listed as a Vermont or federal hazardous waste, must apply for interim certification in accordance with § 7-510 of these regulations.
- (e) Every hazardous waste treatment, storage, or disposal facility issued a certification under the provisions of this subchapter shall, at a minimum, be designed, constructed, operated, and maintained in accordance with all applicable requirements of:
  - (1) **40 CFR Part 264**;
  - (2) 40 CFR Part 266;
  - (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under § 7-106;
  - (4) The large quantity generator standards of § 7-308 except § 7-308(b)(12);
  - (5) The biennial reporting requirements of §§ 7-708(b) and (c); and
  - (6) All applicable sections of the Vermont Environmental Protection Rules, Chapters 1 through 19.

- (f) Certification is required during the active life (including the closure period) of all hazardous waste management units. Owners and operators of landfills, surface impoundments, land treatment units, and waste pile units must have post-closure permits (i.e., certification) as specified in 40 CFR § 270.1(c).
- (g) Certification shall be for a period not to exceed ten (10) years. Each certification for a land disposal facility shall be reviewed by the Secretary five years after the date of certification issuance or reissuance and shall be modified, if necessary, as provided in § 7-507.
- (h) Continuation of Expiring Certificates
  - (1) If the certificate holder has submitted an administratively complete application to renew certification at least 180 calendar days prior to expiration of the effective certification and the Secretary, through no fault of the certificate holder, does not issue a new certificate with an effective date prior to the expiration date of the previous certificate, the conditions of the expired certificate continue in force until the effective date of a new certificate.
  - (2) Certificates continued under this section remain fully effective and enforceable.
  - (3) When the certificate holder is not in compliance with the conditions of the expired or expiring certification, the Secretary may do any or all of the following:
    - (A) Initiate an enforcement action based on the certificate that has been continued;
    - (B) Issue a notice of intent to deny the new request for certification. If the certification is denied, the activities authorized by the continued certificate would have to cease or become subject to an enforcement action;
    - (C) Issue a new certification with appropriate conditions; or
    - (D) Take other actions authorized by these regulations.
- (i) A certification may be transferred by the permittee to a new owner or operator under the provisions of 40 CFR § 270.40.
- (j) For the purposes of construing **40 CFR Parts 260 through 270**, a person who receives certification (i.e., the certificate holder) under this chapter shall also be known as the permittee.
- (k) In lieu of the negative assurance required by 40 CFR § 264.143(f)(3)(iii)(B), the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

#### § 7-505 APPLICATION FOR INITIAL AND RENEWAL CERTIFICATION

- (a) Any person who is required to obtain or renew certification under § 7-504 shall sign and submit an application for certification to the Secretary. When a facility is owned by one person but is operated by another person, it is the operator's duty to obtain certification except that the owner must also sign any documents submitted for the purpose of applying for certification.
- (b) At the time of application, the applicant must:
  - (1) If seeking initial certification for a hazardous waste treatment or disposal facility, have already obtained a certificate of need pursuant to the requirements of 10 V.S.A. § 6606a (refer to § 7-504(b));
  - (2) Submit a disclosure statement pursuant to § 7-504(c);
  - (3) Have complied with the pre-application public meeting and notice requirements of 40 CFR § 124.31.
- (c) An application for certification may be submitted in narrative form. Each application for certification must be signed in accordance with § 7-108, and must contain all applicable information required under 40 CFR §§ 270.10(j), 270.13 (Part A) and 270.14 through 270.28 (Part B).
- (d) In addition to the requirements of **subsection** (c) **of this section**, each application for a hazardous waste land treatment or disposal facility shall include, but not be limited to, the following information:
  - (1) A description of the provisions for hydrogeological studies, monitoring analysis, and protection of groundwater and surface waters;
  - (2) A description of the provisions for post-closure monitoring and maintenance of the facility; and
  - (3) A description of the actions taken by the facility to assure financial responsibility for the post-closure care monitoring period and civil liability arising from non-sudden incidents at the facility.
- (e) Technical data that are required to be submitted in an application, including design drawings, specifications and engineering studies, shall be certified by a professional engineer registered in Vermont.
- (f) The Secretary shall not issue a draft certification until the applicant has fully complied to the Secretary's satisfaction with the specific application requirements for the type of facility involved, unless the only information not submitted is the information required for exposure assessments for surface impoundments or landfills.

(g) Applicants shall keep records of all data used to complete certification applications and any supplemental information submitted to the Secretary for a period of at least three (3) years from the date the application is signed.

#### § 7-506 Procedure for Certification

- (a) Upon completing review of each application for certification under § 7-505, the Secretary shall either issue a draft certificate or deny certification. The Secretary shall prepare a written justification for any certification that has been denied and give public notice of the decision to deny.
- (b) Each draft and final certificate shall contain:
  - (1) All standards, conditions, and requirements that the Secretary has determined to be the best control technology for the specific facility involved. At a minimum, best control technology shall be the design, construction, operation and maintenance requirements referenced in § 7-504(e);
  - (2) All standards, conditions, and requirements that the Secretary has determined necessary to protect human health and the environment, including the "conditions applicable to all permits" specified under 40 CFR § 270.30; and
  - (3) When appropriate, a schedule of compliance leading to compliance with the Waste Management Act and these regulations. Any schedule of compliance shall meet the provisions of 40 CFR § 270.33.
- (c) As necessary, the Secretary shall consult with the Commissioner of the Vermont Department of Health and the Commissioner of the Vermont Department of Labor to avoid conflicts of the standards and conditions of any draft certification with requirements that may be imposed under 18 V.S.A. chapter 28 or any other applicable state safety or health regulation.
- (d) A fact sheet shall be compiled for every draft certificate prepared by the Secretary. The fact sheet shall briefly set forth the significant factual, legal, methodological, and policy questions considered in preparing the draft certificate. In addition, the fact sheet shall include the information described in 40 CFR § 124.8(b).
- (e) For preparing a draft certificate, the record shall consist of: the application, if required, and any supporting data furnished by the applicant; the draft certificate or notice of intent to deny the application or to revoke the certificate; the fact sheet; all documents cited in the fact sheet; and other documents contained in the supporting file for the draft certificate.

#### (f) Public Notice

- (1) The Secretary shall provide notice that a draft certificate has been prepared for a hazardous waste facility, of the opportunity for public comment on such draft certificate, and of the informational public hearing which shall be held for such draft certificate.
- (2) Notice shall be provided by advertisement in major local newspapers of general circulation, broadcast over local radio station and by mailing a copy of a written notice to those persons listed in 40 CFR § 124.10, who shall be included on the facility mailing list. The applicant shall reimburse the Secretary for all costs incurred under this subsection.
- (3) At a minimum, for each draft certificate, the applicable public notice and public comment requirements of 40 CFR §§ 124.10 and 124.32 shall be met.
- (4) The Secretary may assess the need, on a case-by-case basis, for an information repository, and may require that such a repository be maintained by the applicant, in accordance with the requirements of 40 CFR § 124.33.
- (g) Copies of the fact sheet, draft certificate and written notice shall be sent to the applicant, the town in which the facility is located or proposed to be located, any other Agency or subdivision thereof which has issued or may be requested to issue a permit or certificate for the facility, the U.S. Environmental Protection Agency, and any other appropriate government authorities. Copies of the fact sheet, draft certificate and notice shall also be made available to any other interested party.
- (h) Prior to the issuance of each final certificate, the Secretary shall consider all comments raised during the public comment period and prepare a response to comments which specifies:
  - (1) The content of all significant comments;
  - (2) The Secretary's response to those comments;
  - (3) Any changes that will be made to the draft certificate; and
  - (4) The reasons for those changes.
- (i) An appeal may be taken from a final decision on the issuance or denial of a certificate.

#### § 7-507 Modification of Certifications

(a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of

- the causes listed in **subsection (e) of this section** to modify a certification exist. If cause exists, the Secretary may modify the certification accordingly, and may request an updated application if necessary.
- (b) When a certification is modified, only the conditions subject to modification shall be reopened.
- (c) Suitability of the facility location shall not be considered at the time of modification unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time when the certification was issued.
- (d) If cause does not exist under this section, the Secretary shall not modify the certification, unless the modification is at the request of the certificate holder.
- (e) The following are causes for modification of a certification:
  - (1) There are material and substantial alterations or additions to the certified facility or activity which occurred after the certification was issued which justify the application of certification conditions that are different from or absent in the existing certification.
  - (2) Information is received by the Secretary that was not available at the time that the certification was issued (other than revised regulations, guidance, or test methods) and would have justified the application of different certification conditions at the time of issuance.
  - (3) The standards or regulations on which the certification was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision, after the certification was issued.
  - (4) The Secretary determines good cause exists for modification of a certification, such as an act of God, strike, flood, or materials shortage or other events over which the certificate holder has little or no control and for which there is no reasonably available remedy.
  - (5) Cause exists for revocation under § 7-509, and the Secretary determines that modification of the certification is appropriate.
  - (6) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification.

## (f) Modification Procedures

(1) If a modification is requested by the permittee, the Secretary shall approve or deny the request according to the procedures of 40 CFR § 270.42.

- (2) For all modifications sought on the motion of the Secretary, a draft certification shall be prepared, and the procedures and requirements of § 7-506 shall be met.
- (3) If a modification is requested to transfer a facility to a new owner or operator, the Secretary shall review the request according to the procedures of 40 CFR § 270.40.
- (g) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a certificate.

## § 7-508 REVOCATION AND REISSUANCE OF CERTIFICATIONS

- (a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of the causes listed in **subsection** (e) of this section to revoke and reissue a certification exist. If cause exists, the Secretary may revoke and reissue the certification accordingly, and may request an updated application if necessary.
- (b) If a certification is revoked and reissued, the entire certification is reopened and subject to revision and the certification is reissued for a new term. (See 40 CFR § 124.5(c)(2))
- (c) Suitability of the facility location shall not be considered at the time of revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown or which did not exist at the time when the certification was issued.
- (d) If cause does not exist under this section, the Secretary shall not revoke and reissue a certification, except at the request of the certificate holder.
- (e) The following are causes for revocation and reissuance of a certification:
  - (1) Cause exists for termination under § 7-509, and the Secretary determines that revocation and reissuance of the certification is appropriate.
  - (2) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification. When revocation and reissuance is used to transfer a certification to a new owner or operator, the requirements of 40 CFR § 270.41 shall be met.
- (f) The causes for modification listed under §§ 7-507(e)(1) through (4) may be causes for revocation and reissuance of a certification when the certificate holder requests or agrees.

## § 7-509 VOLUNTARY AND INVOLUNTARY TERMINATION OF CERTIFICATIONS

(a) Voluntary Termination of Certifications

The Secretary may terminate a certification upon request of the certificate holder provided the certificate holder:

- (1) Notifies the Secretary in writing of his or her intent to close the facility;
- (2) Closes the facility in accordance with the facility closure plan;
- (3) Requests and receives a determination by the Secretary that the facility has been successfully closed; and
- (4) Notifies persons included on the facility mailing list.
- (b) Involuntary Termination of Certifications
  - (1) The following are causes for terminating a certification during its term, or for denying an application to renew certification:
    - (A) Noncompliance by the certificate holder with any condition of the certification;
    - (B) Failure by the certificate holder to disclose fully all relevant facts in the application or during the certification process;
    - (C) Misrepresentation by the certificate holder of any relevant facts at any time; or
    - (D) A determination by the Secretary that the certified activity endangers human health or the environment and can only be regulated to acceptable levels by termination of the certification.
  - (2) The Secretary shall follow the applicable procedures of 40 CFR § 124.5 and 3 V.S.A. § 814 when terminating any certification under this section.
  - (3) The Secretary may, pursuant to the procedures of this subchapter, deny an application for renewal of certification either in its entirety or as to the active life of a hazardous waste management facility or unit only.

#### § 7-510 Interim Status Certification

- (a) The purpose of this section is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.
- (b) The standards of 40 CFR Part 265, Subpart S of 40 CFR Part 264, and this section apply to owners and operators of facilities that treat, store or dispose of hazardous waste

who have fully complied with the requirements for interim status under § 3005(e) of RCRA and 40 CFR § 270.10 until either certification is made under this subchapter or until applicable Part 265 closure and post-closure responsibilities are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 who have failed to provide timely notification as required by RCRA § 3010(a) and/or failed to file an application for certification as required by subsections (g) and (h) of this section. These standards apply to all treatment, storage and disposal of hazardous waste at these facilities after the effective date of these regulations, except as specifically provided for in this subchapter or subchapter 2.

- (c) All hazardous waste facilities which were in operation or under construction as of November 19, 1980, which have been in operation or under construction since that date, or which are currently operating or under construction without certification shall, at a minimum, be designed, constructed, operated and maintained in accordance with all applicable requirements of:
  - (1) **40 CFR Part 265**;
  - (2) **40 CFR Part 266**;
  - (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under § 7-106; and
  - (4) All applicable sections of the Vermont Environmental Protection Rules, **chapters 1 through 19**.
- In order for a facility to qualify for interim status, the owner or operator must submit a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), an application for interim certification that meets the requirements of **subsection** (g) of this section, and must otherwise meet the requirements of 40 CFR §§ 270.70 through 270.73.
- (e) The following hazardous wastes must not be managed at facilities subject to regulation under this section: EPA hazardous waste codes F020, F021, F022, F023, F026, or F027.
- (f) The requirements of this section apply to owners and operators of all facilities which treat, store or dispose of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 incorporated by reference under § 7-106.
- (g) Owners and operators of hazardous waste management facilities in existence on November 19, 1980 must submit an application for certification or interim certification as required by 40 CFR § 270.10(e). Any person applying for interim certification under this section shall submit a document, signed in accordance with § 7-108, that provides the information required by 40 CFR § 270.13. This document shall be submitted in accordance with the requirements of 40 CFR § 270.10(e).

- (h) (1) If any owner or operator of a hazardous waste management facility has filed for interim status certification and has not yet filed for certification, the owner or operator shall file an amended interim status application:
  - (A) With the Secretary no later than the effective date of regulatory provisions listing or designating wastes as hazardous in the state in addition to those already listed or designated hazardous by the Agency, if the facility is treating, storing or disposing of any of those newly listed or designated wastes; or
  - (B) As necessary to comply with provisions of **40 CFR § 270.72** for changes during interim status.
  - (2) The owner or operator of a facility who fails to comply with the updating requirements of this section does not receive interim status as to the wastes not covered by a duly filed interim status application.
- (i) In lieu of the negative assurance required by 40 CFR § 265.143(e)(3)(iii)(B), the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

## § 7-511 SPECIAL CERTIFICATION

- (a) The Secretary may issue a certificate for a hazardous waste incinerator in accordance with 40 CFR § 270.62.
- (b) The Secretary may issue a certificate for using field tests or laboratory analyses for a land treatment demonstration in accordance with 40 CFR § 270.63.
- (c) The Secretary may issue a research, development, and demonstration certificate for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which certification standards for such experimental activity have not been promulgated under 40 CFR Part 264 or 266. Any such certificate shall include such terms and conditions as will assure protection of human health and the environment. Such certificates shall meet the requirements of 40 CFR § 270.65.
- (d) The Secretary may issue a certificate for hazardous waste boilers and industrial furnaces in accordance with 40 CFR § 270.66.

#### § 7-512 Additional Requirements

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human

health or the environment.



# Subchapter 6: STANDARDS FOR HAZARDOUS WASTES THAT ARE RECYCLED

## § 7-601 PURPOSE, SCOPE, APPLICABILITY

This subchapter defines "hazardous waste recycling," establishes management standards for facilities that recycle hazardous waste, and provides a mechanism for the Secretary to, on a case-by-case basis, exempt a waste that is recycled or reused from part or all of these regulations.

## § 7-602 Definition of Hazardous Waste Recycling

Hazardous waste is recycled if it is used, reused, or reclaimed as follows:

- (a) A hazardous waste is used or reused if it is:
  - (1) Used or reused as an ingredient in an industrial process to make a product, provided the waste is not first being processed or reclaimed; or
  - (2) Used or reused as an effective substitute for a commercial product, provided the waste is not first being processed or reclaimed; or
  - (3) Returned to the original process from which the waste is generated, without first being reclaimed or land disposed. The waste must be returned as a substitute for a feedstock material. In cases where the original process to which the material is returned is a secondary process, the waste must be managed such that there is no placement on the land.

**Note**: Certain hazardous wastes that are recycled by being used or reused as described by **subsection** (a) **of this section** are exempted from regulation as hazardous waste under § 7-204(a)(1).

(b) A hazardous waste is reclaimed if it is processed to recover the hazardous component of the waste as a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

# $\S$ 7-603 Other Sections of these Regulations Applicable to Hazardous Waste Recycling

- (a) Definitions for the terms: "designated facility," "discarded," "reclaimed," "staging," and "used or reused" are provided in § 7-103.
- (b) Exemptions for certain hazardous wastes that are recycled are provided in § 7-204.
- (c) Subsections (3) and (4) of § 7-305(d) specify how on-site recycled waste is counted

- toward generator category.
- (d) Exemptions for certain recycling activities, from **subchapter 5** certification requirements, are provided in § 7-502(k).

### § 7-604 GENERAL STANDARDS APPLICABLE TO ALL HAZARDOUS WASTE RECYCLING ACTIVITIES

- (a) Any residual material resulting from a recycling process must be evaluated in accordance with § 7-303 to determination whether it is subject to regulation as hazardous waste.
- (b) Any facility that treats hazardous waste without recycling it, or that treats hazardous waste prior to recycling it, is subject to regulation under subchapter 5.
  - **Note**: Generators that treat hazardous waste in containers or tanks, and comply with § 7-502(o), are exempt from regulation under subchapter 5.
- (c) Owners or operators of facilities otherwise subject to subchapter 5 certification requirements are subject to the requirements of **Subparts AA**, **BB and CC of 40 CFR Part 264 or 265** for hazardous waste management units that recycle hazardous wastes.
- (d) Hazardous waste that is exported or imported for purpose of recovery is subject to the requirements of 40 CFR Part 262, Subpart H.

#### § 7-605 HAZARDOUS WASTE RECYCLING BY GENERATORS

- (a) Hazardous waste that is recycled on-site by the generator of the waste, must be managed in accordance with:
  - (1) The requirements of  $\S$  7-502(o);
  - (2) The requirements of § 7-604; and
  - (3) All applicable standards of **subchapter 3** (i.e., standards applicable to very small quantity, small quantity, or large quantity generators) until such time that the recycling process is complete.
- (b) Generators that recycle their own hazardous waste on-site according to **subsection** (a) of **this section** are not subject to certification under **subchapter 5** (refer to § 7-502(k)) for the recycling process.
- (c) Generators shipping hazardous waste off-site for recycling shall ship such waste to:
  - (1) A designated facility;

- (2) A facility approved by the Secretary under a recycle/reuse exemption issued according to the requirements of § 7-608; or
- (3) For Vermont-listed hazardous waste, to a facility that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.

## § 7-606 HAZARDOUS WASTE RECYCLING AT OFF-SITE FACILITIES

- (a) Owners or operators of facilities that receive recyclable materials, stage such materials for no more than three consecutive calendar days, and recycle them without storing them before they are recycled are subject to:
  - (1) The requirements of § 7-604;
  - (2) The large quantity generator requirements of § 7-308; and
  - (3) Financial Assurance

Prior to staging any material, demonstrate financial assurance for closure of the facility by:

- (A) Maintaining a closure cost estimate that meets the requirements of 40 CFR § 265.142, and that has been approved by the Secretary; and
- (B) Establishing financial assurance in accordance 40 CFR § 265.143.
- (b) Owners or operators of facilities that store recyclable materials before they are recycled are subject to § 7-604 and all applicable provisions of subchapters 1, 2, 3, 5 and 7 of these regulations.

## § 7-607 RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Any recyclable materials that are applied to or placed on the land before or after mixing or combination with any other substance(s) shall be managed in accordance with 40 CFR §§ 266.20 through 266.23. These materials are referred to as "materials used in a manner that constitutes disposal."

# § 7-608 RECYCLE/REUSE EXEMPTIONS FOR RECYCLABLE HAZARDOUS WASTES AND/OR RECYCLING ACTIVITIES

(a) The Secretary may, on a case by case basis, exempt from part or all of the regulations, a waste generated by a particular generator, transported by a particular transporter, or

treated or stored by a particular facility if the waste is legitimately recycled provided that:

- (1) The recycled material is:
  - (A) Vermont regulated waste listed under § 7-211 of these regulations; or
  - (B) Recycled material described by 40 CFR § 260.30; or
  - (C) Material that is reclaimed and noted with a "-" in column 3 of Table 1 in 40 § CFR 261.2(c).
- (2) The procedural and durational requirements and the criteria and standards used by the Secretary in exempting waste under this section shall be no less stringent than those specified in 40 CFR §§ 260.30, 260.31, and 260.33;
- (3) The standards and requirements which apply to these wastes can be no less stringent than those outlined in 40 § CFR 261.6 and Part 266, if the waste in question is one addressed by these sections of 40 CFR; and
- (4) The recycling, reclamation, or reuse of the waste does not present an actual or potential threat to human health or the environment.
- (b) Any person seeking an exemption under this section shall apply to the Secretary using the **Exemption Procedures for the Recycle and Reuse of Hazardous Waste Form**.
- (c) Any generator or facility whose waste is exempted under this section shall comply with those additional management standards and requirements that the Secretary, after an examination of the factors listed in § 7-216(c), deems necessary to protect human health and the environment.
- (d) Recycle/Reuse exemptions shall be issued for a period not to exceed five (5) years.
- (e) If the holder of a Recycle/Reuse exemption has submitted an administratively complete application to renew the exemption at least 30 calendar days prior to expiration of the effective exemption and the Secretary, through no fault of the Recycle/Reuse exemption holder, does not issue a new exemption with an effective date prior to the expiration date of the previous exemption, the conditions of the expired exemption continue in force until either:
  - (1) The effective date of a new exemption (should the Secretary approve the application); or
  - (2) If the Secretary denies the application to renew, the last day for seeking appeal of the denial, or a later date fixed by order of the reviewing court.

(f) Any Recycle/Reuse exemption without a durational requirement shall expire on July 1, 2013.



# Subchapter 7: MANIFEST AND REPORTING REQUIREMENTS

## § 7-701 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for the use of manifests by hazardous waste generators, transporters, and treatment, storage and disposal facilities to track the movement of hazardous waste from the point of generation to any intermediate points and finally to its ultimate point of disposition. This subchapter also establishes requirements for reportingby generators, transporters and treatment, storage, and disposal facilities. Other reporting requirements for treatment, storage, and disposal facilities are specified in subchapter 5.
- (b) Applicability of electronic manifest system and user fee requirements to facilities receiving state-only regulated waste shipments.
  - (1) For purposes of this subchapter, "state-only regulated waste" means:
    - (A) A non-RCRA waste that a state regulates more broadly under its state regulatory program, or
    - (B) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under Vermont law.
  - (2) In any case in which a state requires a manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall:
    - (A) Comply with the provisions of § 7-704; and
    - (B) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR §§ 264.1300 through 264.1316.
- (c) Availability of information; confidentiality of information
  - (1) After August 6, 2014, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with 40 CFR § 262.20(a)(3).
  - (2) EPA will make any electronic manifest that is prepared and used in accordance with 40 CFR § 262.20(a)(3), or any paper manifest that is submitted to the system under 40 CFR §§ 264.71(a)(6) or 265.71(a)(6) available to the public under this section

when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

# § 7-702 Manifest Requirements Applicable to Generators

- (a) (1) Unless otherwise specified in these regulations, a small or large quantity generator who transports or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a manifest on EPA Form 8700–22, and, if necessary, EPA Form 8700–22A.
  - (2) In lieu of using the manifest form specified in **subsection** (a)(1) of this section, a person required to prepare a manifest may prepare and use an electronic manifest, provided that the person complies with the requirements of:
    - (A) 40 CFR § 262.24 for use of electronic manifests,
    - (B) 40 CFR § 262.25 for electronic manifest signatures, and
    - (C) 40 CFR § 3.10 for the reporting of electronic documents to EPA.
  - (3) Paper manifests may be obtained from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).
  - (4) Any person initiating a shipment of hazardous waste in Vermont, who is required to file a manifest, or other similar report pursuant to 10 V.S.A. chapter 159 or these regulations, shall pay a tax based on the quantity of hazardous waste reported on such manifest or such other report pursuant to 32 V.S.A. chapter 237. When completing a manifest, a generator of waste subject to an alternative tax rate must use the appropriate tax code listed in **Appendix VI** in order for the Secretary to recognize the alternative rate.
- (b) Any generator who transports or offers for transport hazardous waste to a designated facility using a manifest shall:
  - (1) When completing the manifest, use the EPA identification number that is assigned to the generator site at the time of shipment.
  - (2) Ensure that all hazardous waste codes used on the manifest to identify a hazardous waste are the same codes identified for that waste pursuant to 7-202(c).
  - (3) Designate on the manifest one facility that is permitted to handle the waste described

- on the manifest. A generator may also designate one alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary designated facility.
- (4) Sign the manifest certification by hand. Certify to one of the following statements in Item 15 of the manifest:
  - (A) "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;" or
  - (B) "I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."
- (5) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest.
- (6) Retain one copy of the manifest in accordance with **subsection** (b)(5) of this section and give the transporter the remaining copies.
- (7) Retain a copy of each manifest signed in accordance with **subsections** (4) and (5) of **this section** for at least three (3) years from the date of initial shipment or until the generator receives a signed copy from the designated facility that received the waste. The signed copy from the designated facility must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. All retained copies must be legible.
- (8) For shipments of hazardous waste within the United States solely by water (bulk shipments only), send three copies of the manifest dated and signed in accordance with this section to:
  - (A) The owner or operator of the designated facility; or
  - (B) The last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.
- (9) For rail shipments of hazardous waste within the United States which originate at the site of generation, send at least three copies of the manifest dated and signed in accordance with this section to:
  - (A) The next non-rail transporter; if any; or
  - (B) The designated facility if transported solely by rail; or

- (C) The last rail transporter to handle the waste in the United States if exported by rail.
- (10) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, immediately either designate another facility or instruct the transporter to return the waste.
- Wait for confirmation of the shipment by the return of a completed copy of the manifest from the designated facility. All completed copies not returned by the designated facility within 35 days, or not returned by the foreign consignee within 60 days of the initial shipment, must be investigated and reported as provided in § 7-707.
- (12) For shipments of hazardous waste made to a designated facility in an EPA-authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.
- (13) For rejected shipments of hazardous waste or container residues contained in nonempty containers that are returned to the generator by the designated facility (following the procedures of 40 CFR §§ 264.72(f) or 265.72(f)), the generator must:
  - (A) Sign either:
    - (i) Item 20 of the new manifest if a new manifest is used for the returned shipment; or
    - (ii) Item 18c of the original manifest if the original manifest is used for the returned shipment;
  - (B) Provide the transporter a copy of the manifest;
  - (C) Within 30 days of delivery of the rejected shipment or container residues contained in non-empty containers, send a copy of the manifest to the designated facility that returned the shipment to the generator; and
  - (D) Retain at the generator's site a copy of each manifest for at least three years from the date of delivery.
- (c) The manifest requirements of this section do not apply to:
  - (1) Hazardous waste produced by small quantity generators (generators of greater than 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) in a calendar month) where:
    - (A) The waste is reclaimed under a contractual agreement pursuant to which:

- (i) The type of waste and frequency of shipments are specified in the agreement; and
- (ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and
- (B) The generator maintains a copy of the reclamation agreement in his or her files for a period of at least three (3) years after termination or expiration of the agreement.
- (2) The transport of hazardous waste on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Nevertheless, the generator or transporter must comply with the requirements of § 7-105 in the event of a discharge of hazardous waste or release of hazardous material on a public or private right-of-way.
- (3) Hazardous waste produced by very small quantity generators.

## § 7-703 Manifest Requirements for Transporters

- (a) Unless otherwise specified in these regulations, a transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirements of § 7-702(b)(4) through (6), or is provided with an electronic manifest that is obtained, completed, transmitted, and signed with a valid and enforceable electronic signature in accordance with § 7-702(a)(2)(B).
- (b) For exports of hazardous waste subject to the requirements of **Subpart H of 40 CFR Part 262** (Transboundary Movements of Hazardous Waste for Recovery Within OECD),
  a transporter may not accept hazardous waste without a manifest signed by the generator
  in accordance with this section, as appropriate, and for exports occurring under the terms
  of a consent issued by EPA on or after December 31, 2016, a movement document that
  includes all information required by **40 CFR § 262.83(d)**.
- (c) Use of the Electronic Manifest System
  - (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.
    - (A) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining

- a valid and enforceable electronic signature within the meaning of § 7-702(a)(2)(B).
- (B) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.
- (C) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR § 177.817, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle.
- (D) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
- (E) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this section if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.
- (2) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
- (3) Electronic manifest signatures shall meet the criteria described in 40 CFR § 262.25.
- (4) If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:
  - (A) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to § 7-703(c)(1)(C), or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.
  - (B) On each printed copy, the transporter shall include a notation in the Special

Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically.

- (C) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.
- (D) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.
- (5) If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with § 7-703(c)(1)(C). This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner/operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.
- (6) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in § 7-704(d)(7), which applies to corrections made to either paper or electronic manifest records.
- (d) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.
- (e) The transporter must ensure that the manifest accompanies the hazardous waste. In the case of exports occurring under the terms of a consent issued by EPA to the exporter on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by 40 CFR 262.83(d) also accompanies the hazardous waste. In the case of imports occurring under the terms of a consent issued by EPA to the

- country of export or the importer on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by 40 CFR 262.84(d) also accompanies the hazardous waste.
- (f) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:
  - (1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and
  - (2) Retain one copy of the manifest in accordance with § 7-703(1); and
  - (3) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- (g) A transporter transporting hazardous waste from a small quantity generator who generates greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month need not comply with the requirements of § 7-703 when:
  - (1) The waste is being transported pursuant to a reclamation agreement as provided in § 7-702(c)(1); and
  - (2) The transporter records on a log or shipping paper, the following information for each shipment:
    - (A) The name, address and EPA identification number of the generator of the waste;
    - (B) The quantity of waste accepted;
    - (C) All DOT-required shipping information;
    - (D) The date the waste is accepted; and
  - (3) The records required under **subsection (2) of this section** accompany the waste shipment to the reclamation facility; and
  - (4) The transporter retains a copy of the reclamation agreement and the records required under **subsection** (g)(2) of this section for a period of at least three (3) years after termination or expiration of the agreement.
- (h) A water (bulk shipment) transporter need not comply with §§ 7-703(e), (f) and (i) provided the transporter complies with 40 CFR § 263.20(e).
- (i) For shipments involving rail transportation, the requirements of §§ 7-703(e), (f) and (h) do not apply provided the shipment complies with 40 CFR § 263.20(f).

- (j) Transporters who transport hazardous waste out of the United States must:
  - (1) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States;
  - (2) Retain one copy in accordance with § 7-703(1)(4);
  - (3) Return a signed copy of the manifest to the generator; and
  - (4) For paper manifests only:
    - (A) Send a copy of the manifest to the e-Manifest system in accordance with the allowable methods specified in § 7-704(c)(5); and
    - (B) For shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.
- (k) Compliance with the manifest
  - (1) Except as provided in **subsection (2) of this section**, the transporter must deliver the entire quantity of hazardous waste which he or she has accepted from a generator or a transporter to:
    - (A) The designated facility listed on the manifest; or
    - (B) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or
    - (C) The next designated transporter; or
    - (D) The place outside the United States designated by the generator.
  - (2) Hazardous waste not delivered in accordance with subsection (1) of this section
    - (A) If the hazardous waste cannot be delivered in accordance with **subsection** (1)(A), (B), or (D) of this section because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter must contact the generator for further instructions and must revise the manifest according to the generator's instructions.
    - (B) If the hazardous waste is not delivered to the next designated transporter in accordance with **subsection** (1)(C) of this section, and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter must contact the generator for further instructions prior to making any revisions to

the transporter designations on the manifest. The current transporter may thereafter make such revisions if:

- (i) The hazardous waste is not delivered in accordance with **subsection (1)(C)** of this section because of an emergency condition; or
- (ii) The current transporter proposes to change the transporter(s) designated on the manifest by the generator, or to add a new transporter during transportation, to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety; and
- (iii) The generator authorizes the revision.
- (C) If the hazardous waste is not delivered to the next designated transporter in accordance with **subsection** (1)(C) of this section, and the current transporter has authorization from the generator to act as the generator's agent, then the current transporter may change the transporter(s) designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval, provided that:
  - (i) The current transporter is authorized by a contractual provision that provides explicit agency authority for the transporter to make such transporter changes on behalf of the generator;
  - (ii) The transporter enters in Item 14 of each manifest for which such a change is made, the following statement of its agency authority: "Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf;" and
  - (iii) The change in designated transporters is necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.
- (D) The grant by a generator of authority to a transporter to act as the agent of the generator with respect to changes to transporter designations under **subsection** (2)(C) of this section does not affect the generator's liability or responsibility for complying with any applicable requirement under this chapter, or grant any additional authority to the transporter to act on behalf of the generator.
- (3) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter must obtain the following:
  - (A) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy

block of the original manifest. The transporter must retain a copy of this manifest in accordance with § 7-703(I), and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in 40 CFR §§ 264.72(e)(1) through (6) or (f)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6) or (f)(1) through (6).

(B) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with § 7-703(I), and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6).

# (1) Recordkeeping

- (1) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (2) For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter must retain a copy of the shipping paper containing all the information required in 40 CFR § 263.20(e)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (3) For shipments of hazardous waste by rail within the United States:
  - (A) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in 40 CFR § 263.20(f)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter; and
  - (B) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

**Note:** Intermediate rail transporters are not required to keep records pursuant to these regulations.

(4) A transporter who transports hazardous waste out of the United States must keep a copy of the manifest, indicating that the hazardous waste left the United States, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

#### § 7-704 Manifest Requirements for Designated Facilities

- (a) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent must sign and date the manifest as indicated in **subsection** (b) of this section to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- (b) In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall, regardless of the state in which the facility is located:
  - (1) Complete the facility portion of the applicable manifest;
  - (2) Sign and date the facility certification;
  - (3) Submit to the e-Manifest system a final copy of the manifest for data processing purposes; and
  - (4) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR §§ 264.1300 through 264.1316.
- (c) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent must:
  - (1) Perform an inspection upon receipt of each shipment of hazardous waste, comparing the description appearing on the manifest and the waste actually received, noting any discrepancies, as defined in **subsection (i) of this section** on each copy of the manifest. Any discrepancies shall be noted on each copy of the manifest and immediately reported to the Secretary as provided by **subsection (i) of this section**;
  - (2) Sign and date, by hand, each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
  - (3) Immediately give the transporter at least one copy of the manifest;

- (4) Within 30 days of delivery, send a copy (Page 2) of the manifest to the generator;
- (5) Paper manifest submission requirements are:
  - (A) Beginning on June 30, 2018, send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest.
  - (B) Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services; and
- (6) Retain at the facility a copy of each manifest for at least three years from the date of delivery.
- (d) Use of the Electronic Manifest System
  - (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.
    - (A) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 CFR § 262.25.
    - (B) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
    - (C) Any requirement in these regulations for a manifest to accompany a hazardous

- waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.
- (D) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
- (E) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this section if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- (2) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- (3) If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:
  - (A) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the paper replacement manifest.
  - (B) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
  - (C) Within 30 days of delivery of the waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system, and
  - (D) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- (4) If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature

method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

- (5) Imposition of user fee for manifest submissions.
  - (A) As prescribed in 40 CFR § 264.1311, and determined in 40 CFR § 264.1312, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by EPA for the submission and processing of each electronic and paper manifest. EPA shall update the schedule of user fees and publish them to the user community, as provided in 40 CFR § 264.1313.
  - (B) An owner or operator subject to user fees under this section shall make user fee payments in accordance with the requirements of 40 CFR § 264.1314, subject to the informal fee dispute resolution process of 40 CFR § 264.1316, and subject to the sanctions for delinquent payments under 40 CFR § 264.1315.
- (6) Electronic manifest signatures shall meet the criteria described in 40 CFR § 262.25 of this chapter.
- (7) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest.
  - (A) Interested persons must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.
  - (B) Each correction submission must include the following information:
    - (i) The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected;
    - (ii) The item number(s) of the original manifest that is the subject of the submitted correction(s); and
    - (iii) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
  - (C) Each correction submission shall include a statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:

- (i) The certification statement must be executed with a valid electronic signature; and
- (ii) A batch upload of data corrections may be submitted under one certification statement.
- (D) Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.
- (E) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in **subsection** (d)(7)(C)of this section, and with notice of the corrections to other interested persons shown on the manifest.
- (e) The owner or operator of a facility receiving hazardous waste subject to 40 CFR Part 262, subpart H from a foreign source must:
  - (1) Additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s) (EPA Form 8700-22A); and
  - (2) Send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR § 262.82(e) until the facility can submit such a copy to the e-Manifest system in accordance with subsection (c)(5) of this section.
- (f) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, shall comply with 40 CFR § 264.71(b) or 40 CFR § 265.71(b), as applicable.
- As per 40 CFR § 262.84(d)(2)(xv), within three (3) working days of the receipt of a shipment subject to 40 CFR Part 262, Subpart H, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if

requested by any EPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system, for which the owner or operator of a facility bears no responsibility.

- (h) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by Vermont) as hazardous wastes under its state hazardous waste program. Facilities must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.
- (i) Manifest discrepancies
  - (1) Manifest discrepancies are:
    - (A) Significant differences (as defined by **subsection (i)(2) of this section**) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
    - (B) Rejected wastes, which may be a full or partial shipment of hazardous waste that the designated facility cannot accept; or
    - (C) Container residues, which are residues that exceed the quantity limits for "empty containers" set forth in § 7-203(j).
  - (2) Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
  - (3) Upon discovering a significant difference in quantity or type, the facility owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Secretary a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
  - (4) For any rejected wastes, or container residues described in **subsection** (i)(1)(C) of **this section**, the facility shall comply with the applicable requirements of 40 CFR §§ 264.72(d) through (g) and 40 CFR §§ 265.72(d) through (g).
- (j) If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-

site source without an accompanying manifest, or without an accompanying shipping paper as described by 40 CFR §263.20(e) for water (bulk shipment) transporters, and if the waste is not excluded from the manifest requirement, then the owner or operator must prepare and submit a letter to the Secretary within 15 days after receiving the waste. The unmanifested waste report must contain the following information:

- (1) The EPA identification number, name and address of the facility;
- (2) The date the facility received the waste;
- (3) The EPA identification number, name and address of the generator and the transporter, if available;
- (4) A description and the quantity of each unmanifested hazardous waste the facility received:
- (5) The method of treatment, storage, or disposal for each hazardous waste;
- (6) The certification signed by the owner or operator of the facility or his authorized representative; and,
- (7) A brief explanation of why the waste was unmanifested, if known.

### § 7-705 RESERVED

### **§ 7-706** RESERVED

#### § 7-707 EXCEPTION REPORTING

- (a) Each generator who does not receive a completed copy of the manifest
  - (1) from the designated facility within 35 days, or
  - (2) from the foreign consignee within 60 days,
    - of the initial shipment must take all actions necessary to locate the shipment and manifest, including contacting the designated transporter and designated facility.
- (b) Each generator who does not receive a completed copy of the manifest from the designated facility within 45 days of the initial shipment must immediately submit an exception report to the Secretary. The report must include a legible copy of the manifest and a cover letter signed by the generator or his or her authorized representative explaining the efforts taken to locate the waste and results of those efforts.

- (c) Each generator who submits an exception report under **subsection** (b) of this section shall keep a copy of each submitted report for at least three (3) years from the due date of the report.
- (d) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are forwarded to an alternate facility by a designated facility using a new manifest (following the procedures of 40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6)), the generator must comply with the requirements of subsection (a) or (b) of this section, as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of subsections (a) or (b) of this section for a shipment forwarding such waste to an alternate facility by a designated facility:
  - (1) The copy of the manifest received by the generator must have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility, and
  - (2) The 35/45/60-day timeframes begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

## § 7-708 BIENNIAL REPORTING

- (a) Biennial report for large quantity generators:
  - (1) A generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must complete and submit **EPA**Form 8700-13 A/B to the Secretary by March 1 of the following even-numbered year and must cover generator activities during the previous year.
  - Any generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who treats, stores, or disposes of hazardous waste on site must complete and submit **EPA Form 8700-13 A/B** to the Regional Administrator by March 1 of the following even-numbered year covering those wastes in accordance with the provisions of 40 CFR Parts 264, 265, 266, 267 and 270. This requirement also applies to large quantity generators that receive hazardous waste from very small quantity generators pursuant to § 7-308(d).
  - (3) Exports of hazardous waste to foreign countries are not required to be reported on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR § 262.83(g) for hazardous waste exporters.
- (b) The owner or operator of each designated facility must complete and submit **EPA Form**

- **8700-13** A/B to the Secretary by March 1 of the following even numbered year and must cover activities during the previous year.
- (c) Every large quantity generator and designated facility shall keep a copy of each biennial report for at least three (3) years from the due date of the report.

# § 7-709 ADDITIONAL REPORTING

The Secretary may require any generator, transporter or facility to submit such additional information as he or she deems necessary to implement these regulations.

# § 7-710 RECORD RETENTION

All record retention periods specified in this subchapter shall be automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Secretary, or as requested by the EPA Administrator in the case of records required for hazardous waste exports.

#### Subchapter 8: USED OIL MANAGEMENT STANDARDS

## § 7-801 PURPOSE AND APPLICABILITY

This subchapter identifies those materials that may (and those that may not) be managed as used oil, and establishes standards for their handling, storage, transport, aggregation, collection, and burning as used oil fuel. This subchapter presumes that used oil is reused, processed or burned for energy recovery. Since used oil that meets fuel burning specifications has value without prior processing; this subchapter distinguishes used oil fuel from used oil by allowing used oil fuel to be managed according to abbreviated standards. Used oil that is to be disposed of cannot be managed under this subchapter and must be evaluated to determine if it is subject to regulation as hazardous waste. Unless being managed as a hazardous waste, all used oil is subject to regulation under this subchapter.

The following rules incorporate provisions and exemptions from other environmental protection rules promulgated under the authority of 10 V.S.A. chapters 59 and 159.

## § 7-802 DEFINITIONS

Terms defined in § 7-103 of these regulations or in 40 CFR Parts 260 through 270 and Part 279 have the same meaning when used in this subchapter. For the purposes of this subchapter, the terms listed below are defined as follows:

"Burner" means a person who burns used oil fuel for energy recovery.

"Do-it-yourselfer used oil" means used oil that is derived from households, such as used oil generated by individuals through the maintenance of their personal vehicles.

"Do-it-yourselfer used oil generator" or "do-it-yourselfer" means an individual who generates "do-it-yourselfer used oil".

"Marketer" means any person, with the exception of do-it-yourselfers, who conducts either of the following activities:

- (a) Directs a shipment of off-specification used oil from their facility to a used oil burner; or
- (b) With the exception of used oil generators, and transporters who transport used oil received only from generators, any person who first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in **Table 1 of § 7-812(c)**.

"Off-specification used oil" is used oil that exceeds any maximum allowable level or that does not meet any minimum allowable level listed in Table 1 of § 7-812(c).

- "**Processing**" means 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 product. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the used oil fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.
- "Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.
- "Small fuel burning equipment" means fuel burning equipment with a maximum operating heat input equal to or less than 500,000 BTU per hour.
- "Specification used oil" is any used oil that does not exceed any maximum allowable level, and meets the minimum allowable levels listed in Table 1 of § 7-812(c).
- "Used Oil" means 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 does not include materials refined from crude oil that are fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits); these materials are subject to regulation under subchapters 1 through 7, as applicable.
- "Used Oil Aggregation Point" means any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of no more than 55 gallons. Used oil aggregation points may also accept do-it-yourselfer generated used oil.
- "Used Oil Collection Facility" means any facility or site that accepts/aggregates and stores used oil collected from used oil generators who bring used oil to the collection facility in shipments of no more than 55 gallons. Used oil collection facilities may also accept used oil from do-it-yourselfers.
- "Used Oil Fuel" means used oil shown to meet the Table 1 specifications in accordance with § 7-812(c) and that is burned for energy recovery.
- "Used Oil Generator" means any person, by site, whose act or process produces used oil that is not "do-it-yourselfer used oil" or whose act first causes used oil to become subject to regulation.
- "Used Oil Handler" means any person subject to §§ 7-807 through 7-813 of this subchapter.
- "Used Oil Processor" means a facility that processes used oil.
- "Used Oil Transfer Facility" means 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 and not longer than 35 days during the normal course of transportation. Transfer facilities that store used oil for more than 35 days are subject to the used oil processor requirements of § 7-813.

"Used Oil Transporter" means 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.

"Vaporizing Used-Oil Burning Equipment" means any equipment which generates heat by the introduction of fuel onto a heated device to produce vapors which are then burned for heat recovery.

# § 7-803 Prohibitions

The following uses or activities are prohibited:

- (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;
- (b) The use of any used oil for road oiling or dust suppression;
- (c) Burning off-specification used oil in small fuel burning equipment;
- (d) Burning used oil for firefighter training;
- (e) Burning used oil for energy recovery in any food product processing unless approved by the Secretary in writing;
- (f) The sale or use of vaporizing used-oil burning equipment;
- (g) Management of used oil in anything other than containers or tanks as specified under § 7-806 unless the units are subject to regulation under subchapter 5 of these regulations;
- (h) Pursuant to 10 V.S.A. § 6621a, the knowing disposal of used oil in a solid waste landfill; and
- (i) Pursuant to 10 V.S.A. § 6616, the release of hazardous material (including used oil) into the surface or groundwater, or onto the land of the state.

### § 7-804 EXEMPTIONS

(a) Do-it-yourselfers who produce used oil (specification or off-specification) are exempt

from the provisions of this subchapter. Once do-it-yourselfer used oil is accepted by a used oil aggregation point, collection facility, marketer, burner, or processor, the used oil is subject to regulation under this subchapter.

- (b) Used oil generated from normal shipboard operations, aboard vessels at sea, lake, or river or at port, is considered to be generated at the time it is transported ashore and is not subject to the requirements of this subchapter until the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the oil in compliance with the requirements of this subchapter once the used oil is transported ashore. The co-generators may decide among them which party will fulfill the requirements of this subchapter.
- (c) Farmers who, in a calendar year, generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm are not subject to the requirements of this subchapter.
- (d) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to the requirements of this subchapter.
- (e) Wastewater, the discharge of which is subject to regulation under either § 402 or § 307(b) of the Clean Water Act (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil is not subject to the requirements of this subchapter. For purposes of this paragraph, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment, during normal operations, or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, and will not apply to used oil recovered from wastewaters.
- (f) Used oil that is to be burned for energy recovery (i.e., "used oil fuel") in small fuel burning equipment is exempt from the provisions of this subchapter provided:
  - (1) The requirements of § 7-812(a) are met, and the used oil has been shown to meet the Table 1 specifications in accordance with §§ 7-812(c)(1) through (3);
  - (2) The person making that showing complies with any applicable marketer requirements of § 7-809; and
  - (3) The used oil is managed in accordance with the general used oil management standards of § 7-806.

#### § 7-805 USED OIL DETERMINATION

This section identifies those materials that may be managed as used oil or used oil fuel under this subchapter. It also identifies certain materials that cannot be managed as used oil and indicates whether they may be subject to regulation as hazardous waste.

- (a) Used oil drained, separated, or removed from materials containing or otherwise contaminated with used oil may be managed as used oil under this subchapter.
- (b) Materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material are not used oil, and are subject to the hazardous waste determination requirement of § 7-303.

**Note:** These materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under § 7-211 are met and/or they exhibit a hazardous characteristic.

- (c) Mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this subchapter.
- Used oil that contains PCBs at any concentration less than 50 parts per million may be managed as used oil under this subchapter unless, because of dilution, it is regulated under 40 CFR Part 761 as a used oil containing PCBs at 50 parts per million or greater. Used oil containing PCBs at concentrations equal to or greater than 50 parts per million is subject to regulation both as hazardous waste under § 7-211/VT01 (unless it is exempt pursuant to § 7-203(t)), and under 40 CFR Part 761. No person may avoid these provisions by diluting used oil containing PCBs, unless otherwise specifically provided for in this subchapter or 40 CFR Part 761. PCB-containing used oil subject to the requirements of this subchapter may also be subject to the prohibitions and requirements found at 40 CFR Part 761, including 40 CFR §§ 761.20(d) and (e).
- (e) Materials derived from used oil.
  - (1) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:
    - (A) Not used oil and thus are not subject to this subchapter, and
    - (B) Not hazardous wastes and thus are not subject to the remainder of these regulations.
  - (2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this subchapter.

(3) Except as provided in § 7-804(d), materials derived from used oil that are disposed of or used in a manner constituting disposal are not used oil, and are subject to the hazardous waste determination requirement of § 7-303 and to management as a hazardous waste when applicable.

## (f) Rebuttable presumption

- (1) Used oil containing more than 1,000 parts per million total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215 of these regulations. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II of these regulations). The rebuttable presumption does not apply to:
  - (A) Metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 7-807(e), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
  - (B) Used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.
- (2) Any person choosing to rebut a presumption that used oil is hazardous waste because it contains more than 1,000 parts per million total halogens must maintain written records demonstrating that the used oil does not contain hazardous waste.

## § 7-806 GENERAL USED OIL MANAGEMENT STANDARDS

With the exception of do-it-yourselfers, the following requirements and standards apply to all used oil handlers:

- (a) Used oil shall be stored only in containers or tanks as specified by **subsections** (b) **through** (d) of this section.
- (b) Containers holding used oil shall be managed as follows:
  - (1) Containers shall be kept closed at all times, except when adding or removing used oil;
  - (2) A container holding used oil must not be opened, handled or stored in a manner which may rupture the container or cause a release. If a container begins to leak, the used oil must immediately be transferred from the leaking container to a container that is in good condition, or the used oil shall be managed in some other way that

- complies with the requirements of this section;
- (3) A container holding used oil must be made of or lined with materials which will not react with and are otherwise compatible with used oil;
- (4) Containers holding used oil must be in good condition (no severe rusting, apparent structural defects or deterioration);
- (5) Containers holding used oil must be labeled or marked with the words "Used Oil" or "Used Oil Fuel," as appropriate, such that the label or marking is visible;
- (6) Containers holding used oil must be stored on an impervious surface;
- (7) A container holding used oil may be stored out-of-doors only if the container is placed within a structure that sheds rain and snow; and
- (8) A container holding a mixture of used oil and water shall be placed within a structure that protects the container from freezing.
- (c) Underground storage tanks (USTs) holding used oil shall be managed as follows:
  - (1) An UST holding used oil must be permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank Rules;
  - (2) Fill pipes used to transfer used oil into an UST must be marked or labeled to clearly indicate used oil storage; and
  - (3) Any residue removed from within an UST system being used (or that was last used) to hold used oil, that is generated as a result of normal operation, maintenance or closure of the UST and that cannot be managed as used oil under this subchapter, must be evaluated to determine if it is a hazardous waste and managed as a hazardous waste when applicable.
- (d) Above-ground storage tanks (including unregistered tank trailers) holding used oil shall be:
  - (1) Installed and operated in accordance with Vermont Aboveground Tank Rules.
  - (2) Clearly marked with the words "Used Oil" or "Used Oil Fuel," as appropriate.
  - (3) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs. If a tank begins to leak, the owner or operator must immediately either transfer the used oil from that tank to another tank or to containers that are in good condition, or manage the used oil in some other way that complies with the requirements of this section.

- (4) If located out-of-doors, equipped with secondary containment as specified in 40 CFR §§ 279.45(e) and (f).
- (e) Response to a Release of Used Oil
  - (1) Upon detection of a release of used oil to the environment that is not subject to the requirements of **40 CFR Part 280 Subpart F** (Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances), a used oil handler must perform the following cleanup steps:
    - (A) Stop the release;
    - (B) Contain the released used oil;
    - (C) Clean up and manage properly the released used oil and other materials so that they no longer present a hazard to human health or the environment; and
    - (D) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

**Note:** Clean-up materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under § 7-211 are met and/or they exhibit a hazardous characteristic.

- (2) A release of two (2) gallons or more of used oil to the lands or surface waters of the state shall be immediately reported to the Secretary by the person or persons exercising control of such oil in accordance with the requirements of § 7-105(b).
- (3) If requested by the Secretary, a written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (e)(2) of this section**. The report shall be sent to: The Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive Davis 1, Montpelier, VT 05620-3704.

**Note:** Under the Federal Water Pollution Control Act, certain discharges of "oil" are prohibited and must be reported pursuant to the requirements of **40 CFR Part 110** / Discharge of Oil.

- (f) Used oil handlers are subject to all applicable Spill Prevention, Control and Countermeasure requirements of **40 CFR Part 112**.
- (g) Disposal of Used Oil

The following requirements apply to used oils that cannot be processed or burned for energy recovery and therefore must be disposed of:

(1) Used oils that cannot be recycled under this subchapter must be evaluated in

- accordance with the hazardous waste determination requirement of § 7-303 and managed as a hazardous waste when applicable.
- (2) Used oils that cannot be processed or burned for energy recovery under this subchapter and that are not hazardous wastes must be disposed in accordance with Vermont's Solid Waste Management Regulations.

**Note:** "Waste oil" is banned from landfill disposal under **10 V.S.A. § 6621a**. For the purposes of this note, "waste oil" means "used oil" (i.e., used oil is banned from landfill disposal).

## § 7-807 STANDARDS FOR USED OIL GENERATORS

- (a) This section applies to all used oil generators as defined under § 7-802 of this subchapter.
- (b) Used oil generators shall comply with the general standards set forth under § 7-806, and the following, as applicable:
  - (1) The marketer standards set forth under § 7-809; and
  - (2) The standards for burning used oil for energy recovery set forth under § 7-812.
- (c) Except as provided in **subsections** (d) and (e) of this section, used oil generators must ensure that their used oil is transported only by transporters who are permitted according to the requirements of § 7-811(b)(2).
- (d) A used oil generator may transport used oil that is either generated at the used oil generator's site or collected from household do-it-yourselfers to a used oil collection facility or an aggregation point without complying with the transporter requirements of § 7-811, provided that:
  - (1) The used oil is transported in a vehicle owned by the used oil generator or a vehicle owned by an employee of the used oil generator;
  - (2) Containers used to transport used oil must meet the standards set forth under § 7-806(b), and the applicable Department of Transportation regulations of 49 CFR Parts 173, and 178;
  - (3) No more than 55 gallons of used oil is transported at any time; and
  - (4) The used oil is transported to either a used oil collection facility or to an aggregation point as defined under § 7-802.

## (e) Tolling arrangements

A used oil generator may arrange for used oil to be transported by a transporter without an EPA identification number if the used oil is reclaimed under a contractual agreement pursuant to which reclaimed oil is returned by the processor to the generator for use as a lubricant, cutting oil, or coolant. The contract (known as a "tolling arrangement") must indicate:

- (1) The type of used oil and the frequency of shipments;
- (2) That the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and
- (3) That reclaimed oil will be returned to the generator.
- (f) Used oil generators who transport more than 55 gallons of used oil at one time must comply with the transporter requirements of § 7-811.
- (g) Except as provided in **subsections** (g)(1)(A) through (E) of this section, used oil generators who process used oil shall comply with the requirements of § 7-813.
  - (1) Used oil generators who perform the following activities are not processors provided that the used oil is generated on-site and is not being sent off-site to a burner of on- or off-specification used oil fuel:
    - (A) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the used oil generator;
    - (B) Separating used oil from wastewater generated on-site, to make the wastewater acceptable for discharge or reuse pursuant to § 402 or § 307(b) of the Clean Water Act or other applicable Federal or state regulations governing the management or discharge of wastewaters;
    - (C) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;
    - (D) Draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil, in order to remove excessive oil to the extent possible pursuant to § 7-805; or
    - (E) Filtering, separating or otherwise reconditioning used oil before burning it in small fuel burning equipment pursuant to § 7-812.
- (h) Used oil generators who provide used oil or used oil fuel to an off-site facility shall retain records which document the amount of used oil or used oil fuel provided, the date of each

shipment, and the name, address, and telephone number of the facility to which the used oil or used oil fuel was provided for a period of three years.

#### § 7-808 STANDARDS FOR USED OIL AGGREGATION POINTS

- (a) This section applies to owners or operators of used oil aggregation points as defined under § 7-802 of this subchapter.
- (b) Owners or operators of used oil aggregation points shall comply with the generator standards set forth under § 7-807 of this subchapter.

# § 7-809 STANDARDS FOR USED OIL FUEL MARKETERS

- (a) This section applies to marketers as defined under § 7-802.
- (b) Persons who market used oil fuel shall notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of § 7-104.
- (c) Marketers initiating or accepting a shipment of used oil fuel must maintain the following records for a minimum of three years:
  - (1) Copies of all test results applicable to the shipment of used oil fuel, and/or documentation of total halogen field screening results as required under § 7-812(c); and
  - (2) An operating log for all shipments of used oil fuel that includes the following information:
    - (A) The name, EPA identification number, and address of the facility to which used oil fuel is sent or from which used oil fuel is received;
    - (B) The quantity of used oil fuel shipped or received;
    - (C) The date of shipment or delivery; and
    - (D) The name, EPA identification number, and address of the transporter.
  - (3) The certification required by subsection (f)(2) of this section.
- (d) A marketer who stores used oil fuel shall manage his or her facility in accordance with the general standards set forth under § 7-806.
- (e) Marketers shall comply with the following, as applicable:

- (1) The used oil generator standards set forth under § 7-807;
- (2) The used oil collection facility standards set forth under § 7-810;
- (3) The used oil transporter standards set forth under § 7-811;
- (4) The standards for burning used oil fuel for energy recovery set forth under § 7-812; and
- (5) The used oil processor standards set forth under § 7-813.
- (f) Off-specification used oil
  - (1) A marketer may initiate a shipment of off-specification used oil only to a used oil burner that meets the requirements of § 7-812(d).
  - (2) Before a marketer directs the first shipment of off-specification used oil to a burner, the marketer must obtain a one-time written and signed notice from the burner certifying that:
    - (A) The burner has notified EPA stating the location and general description of used oil management activities; and
    - (B) The burner will burn the off-specification used oil only in an industrial furnace or boiler identified in 40 CFR § 279.61(a).

# § 7-810 STANDARDS FOR USED OIL COLLECTION FACILITIES

- (a) This section applies to owners or operators of used oil collection facilities as defined under § 7-802 of this subchapter.
- (b) Persons who own or operate a used oil collection facility shall notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of § 7-104 of these regulations.
- (c) The owner or operator of a used oil collection facility shall manage such facility in accordance with the general standards set forth under § 7-806, and the following, as applicable:
  - (1) The generator standards set forth under § 7-807;
  - (2) The marketer standards set forth under § 7-809;

- (3) The standards for burning used oil for energy recovery set forth under § 7-812; and
- (4) The processor standards set forth under § 7-813.
- (d) Used oil collection facilities shall be equipped with a fire extinguisher or other firecontrol equipment, and spill control equipment to assure containment of used oil in the event of a release.

## § 7-811 STANDARDS FOR USED OIL TRANSPORTERS

- (a) This section applies to used oil transporters as defined under § 7-802 of this subchapter.
- (b) With the exception of persons transporting used oil on-site, do-it-yourselfers, used oil generators self-transporting up to 55 gallons of used oil according to the provisions of § 7-807(d), persons transporting used oil fuel, and persons transporting used oil pursuant to tolling agreements that meet the requirements of § 7-807(e), persons transporting used oil shall comply with the following:
  - (1) Notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of §§ 7-104 and 7-406(d)(1) and (2).
  - (2) Obtain a permit from the Secretary according to the requirements of **subchapter 4** of these regulations.
  - (3) Used oil transporters who operate transfer facilities shall comply with the requirements of 40 CFR § 279.45 (Used Oil Storage at Transfer Facilities).
  - (4) Comply with all applicable requirements under the U.S. Department of Transportation regulations in 49 CFR Parts 171 through 180. Persons transporting used oil that meets the definition of a hazardous material in 49 CFR § 171.8 must comply with all applicable regulations in 49 CFR Parts 171 through 180.
  - (5) Rebuttable presumption for used oil
    - (A) To ensure that used oil is not a hazardous waste under the rebuttable presumption of § 7-805(f), the used oil transporter shall determine whether the total halogen content of used oil being transported or stored at a transfer facility is above or below 1,000 parts per million. The transporter must make this determination by:
      - (i) Testing the used oil; or
      - (ii) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.

- (B) Records of testing conducted or information used to comply with **subsection** (b)(5)(A) of this section must be maintained by the transporter for at least 3 years.
- (6) In addition to the above, used oil transporters are subject to the following, as applicable:
  - (A) The general standards set forth under § 7-806;
  - (B) The generator standards set forth under § 7-807;
  - (C) The marketer standards set forth under § 7-809;
  - (D) The standards for burning used oil for energy recovery set forth under § 7-812; and
  - (E) The processor standards set forth under § 7-813.

**Note:** Subsection (b) of this section applies to the transportation of collected do-it-yourselfer used oil from regulated used oil generators, collection facilities, aggregation points, or other facilities where do-it-yourselfer used oil is collected.

- (c) Used oil transporters may consolidate or aggregate loads of used oil for the purposes of transportation but, with the following exceptions, may not process used oil unless the processor standards set forth under § 7-813 are met.
  - (1) 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.
  - (2) Transporters may remove used oil from oil bearing electrical transformers and turbines and filter that used oil prior to returning it to its original use.
- (d) Transporters who generate residues from the storage or transport of used oil must manage the residues as specified in § 7-805.
- (e) Transporters who import used oil from abroad or export used oil outside of the United States are subject to the requirements of this section from the time the used oil enters and until the time it exits Vermont.
- (f) Unless trucks previously used to transport hazardous waste are emptied as described in § 7-203(j) of these regulations prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and must be managed as hazardous waste.
- (g) A used oil transporter shall deliver used oil to:
  - (1) Another used oil transporter, provided that the transporter is permitted as specified by

# subsection (b)(2) of this section, and has obtained an EPA identification number; or

- (2) A used oil collection facility that has obtained an EPA identification number, in shipments of no more than 55 gallons; or
- (3) A used oil burner or processing facility which has been assigned an EPA identification number.
- (h) Used oil transporters shall maintain, for a period of three years, an operating log that documents the following information for each used oil shipment made:
  - (1) The name, address, and EPA identification number (if one is required) of the used oil generator, collection facility, transporter, or processor who provided the used oil for transport;
  - (2) The quantity of used oil accepted;
  - (3) The date that the transporter accepts a shipment of used oil for transport, and the name and signature of the person representing the used oil generator, transporter, or processor who offered the used oil for transport;
  - (4) The name, address, and EPA identification number (if one is required) of the used oil collection facility, transporter, burner, or processor to which the used oil was delivered;
  - (5) The quantity of used oil delivered; and
  - (6) The date of delivery and the name and signature of the person representing the used oil collection facility, transporter, burner, or processor who received the used oil.
- (i) Response to Releases of Used Oil during Transport
  - (1) In the event of a release of used oil during transport, a used oil transporter shall comply with the release response requirements of § 7-806(e).
  - (2) If a discharge of used oil occurs during transportation and an official (State or local government or a Federal Agency) acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by transporters who do not have EPA identification numbers.
  - (3) An air, rail, highway, or water transporter who has discharged used oil must:
    - (A) Give notice, if required by 49 CFR § 171.15 to the National Response Center (800-424-8802 or 202-426-2675); and

- (B) Report in writing as required by **49 CFR § 171.16** to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.
- (4) A water transporter who has discharged used oil must give notice as required by 33 CFR § 153.203.
- (j) A used oil transporter shall report to the Secretary as required by § 7-406(d)(5).

# § 7-812 STANDARDS FOR BURNING USED OIL FUEL FOR ENERGY RECOVERY

- (a) Any person burning used oil fuel for energy recovery in small fuel burning equipment is subject to the following:
  - (1) The types of used oil which may be burned as fuel in small fuel burning equipment is limited to:
    - (A) Used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil that meets the specifications listed in **Table 1** of this section;
    - (B) Mixtures of virgin fuel oil and specification used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil; and
    - (C) Types of specification used oil other than those listed in **subsections** (a)(1)(A) and (B) of this section that have been approved by the Secretary. Approval shall be granted on a case-by-case basis following the review by the Secretary of relevant material safety data information, if available, and a narrative description of the process generating the used oil.
  - (2) Specification used oil fuel from the following sources may be burned in small fuel burning equipment:
    - (A) On-site;
    - (B) Do-it-yourselfers;
    - (C) An off-site facility that is owned or operated by the burner;
    - (D) An off-site facility that is not owned or operated by the burner provided the burner retains records for a period of three years which document the amount of used oil fuel accepted; the name, address, and telephone number of the facility from which the used oil fuel was accepted; and the specification testing results for the used oil fuel.
  - (3) The combustion gases from burning used oil fuel in small fuel burning equipment

- must be vented to ambient air.
- (4) The owner or operator of any facility that burns used oil fuel in small fuel burning equipment shall maintain records for a period of three years documenting that the used oil fuel has been evaluated in accordance with **subsection** (c) of this section.
- (b) Any person burning or proposing to burn used oil fuel in fuel burning equipment other than small fuel burning equipment shall:
  - (1) Comply with §§ 5-221(2), as applicable, of the Vermont Air Pollution Control Regulations; and
  - (2) Maintain records for a period of three years documenting:
    - (A) The amount of used oil fuel burned on-site; and
    - (B) That the used oil fuel has been evaluated in accordance with **subsection** (c) of this section.
- (c) Used Oil Fuel Specifications
  - (1) Used oil fuel that is marketed or burned for energy recovery must be evaluated to determine if it meets the specifications listed in **Table 1** of this section as follows:
    - (A) Used oil generators that burn their own used oil on-site, or that burn off-site generated used oil received in shipments of less than or equal to 55 gallons, in small fuel burning equipment, must initially test the used oil from each source for total halogens. If there is reason to believe that any of the remaining **Table 1** specifications would not be met by a volume of used oil, the used oil generator must test the used oil for any suspected constituents or properties.
    - (B) Any used oil fuel delivered to burners in shipments greater than 55 gallons, must be initially tested to establish that all of the **Table 1** specifications are met.

**Note:** Field screening test kits may be used to determine if the allowable level for total halogens specified in **Table 1** is met.

(2) Used oil fuel from a specific source must be re-tested if there is reason to believe that the quality of the used oil, or the process that generates the used oil, has changed such that the **Table 1** specifications would not be met.

Note: "ppm" means "parts per million", by weight on a water free basis.

TABLE 1 - USED OIL FUEL SPECIFICATIONS

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash Point	100° F minimum
Total Halogens	1000 ppm maximum <sup>1</sup>
Polychlorinated biphenyls (PCBs)	< 2 ppm maximum
Net Heat of Combustion	8000 BTU/lb minimum

- (3) As specified in § 7-804(f), once used oil fuel that meets the requirements of § 7-812(a) has been shown to meet the Table 1 specifications in accordance with subsections (1) through (3) of this section, and the person making that showing complies with the applicable marketer requirements of § 7-809, the used oil fuel is only subject to the general used oil management standards of § 7-806.
- (4) Used oil that does not meet the specifications identified by **Table 1** (i.e., off-specification used oil) must be managed as follows:
  - (A) As hazardous waste (identified by at least the VT02 hazardous waste code listed under § 7-211); or
  - (B) As used oil processed in a manner other than being burned for energy recovery; or
  - (C) In accordance with **subsection** (d) of this section.
- (d) Any person burning off-specification used oil must comply with 40 CFR Part 279, Subpart G (Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery), and §§ 5-221(2), as applicable, of the Vermont Air Pollution Control Regulations.

<sup>&</sup>lt;sup>1</sup> Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste as specified under § 7-805(f).

# § 7-813 STANDARDS FOR USED OIL PROCESSORS

A used oil processor (as defined in § 7-802) must comply with 40 CFR Part 279 Subpart F (Standards for Used Oil Processors and Re-Refiners).



# Subchapter 9: UNIVERSAL WASTE MANAGEMENT STANDARDS

## § 7-901 PURPOSE, SCOPE AND APPLICABILITY

- (a) This subchapter establishes alternative management standards for certain batteries, pesticides, thermostats, PCB-containing fluorescent light ballasts, lamps, mercury-containing devices, cathode ray tubes, postconsumer paint, and aerosol cans that would otherwise have to be managed as hazardous waste. As allowed by § 7-203(s), these "universal" hazardous wastes can be managed under the streamlined provisions of this subchapter in lieu of the hazardous waste management requirements set forth under subchapters 1 through 7. Specifically, this subchapter establishes standards for small and large quantity handlers, universal waste transporters, and destination facilities; it also provides a petition mechanism for amending these regulations to add a hazardous waste to the category of universal wastes.
- (b) Persons managing the household wastes that are exempt under § 7-203(a) and are also of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of this subchapter. Persons who commingle the household wastes together with universal waste regulated under this subchapter must manage the commingled waste under the requirements of this subchapter.

# § 7-902 APPLICABILITY TO BATTERIES

With the exception of spent lead-acid batteries exempted under § 7-204(f) of these regulations, persons managing batteries, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208), including spent lead acid batteries that are not managed according to the provisions of § 7-204(f), may comply with the requirements of 40 CFR Part 273 in lieu of managing those batteries as hazardous wastes under subchapters 1 through 7 of these regulations.

# § 7-903 APPLICABILITY TO PESTICIDES

- (a) With the exception of the pesticides listed in **subsection** (b) of this section, the requirements of this subchapter apply to persons managing pesticides, as defined in § 7-911, that are hazardous waste, and that meet one or more of the following conditions:
  - (1) Recalled pesticides that are stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA § 19(b), including, but not limited to those owned by the registrant responsible for conducting the recall.
  - (2) Recalled pesticides that are stocks of a suspended or canceled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

- (3) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- (b) The requirements of this subchapter do not apply to persons managing the following pesticides:
  - (1) Pesticides described in **subsection** (a) of this section that are managed by farmers in compliance with § 7-203(r);
  - (2) Pesticides not meeting one or more of the conditions of **subsection** (a) of this section. These pesticides must be managed in compliance with the hazardous waste regulations set forth under **subchapters 1 through 7**, except that aerosol cans as defined in § 7-911 that contain pesticides may be managed as aerosol can universal waste under § 7-912(d)(9); and
  - (3) Pesticides that do not meet the criteria for waste generation in **subsection** (c) of this section.
- (c) Generation of waste pesticides
  - (1) A recalled pesticide described in **subsections** (a)(1) and (a)(2) of this section becomes a waste on the first date on which both the generator of the recalled pesticide agrees to participate in the recall, and the person conducting the recall decides to discard the pesticide (e.g., burn the pesticide for energy recovery).
    - **Note:** A recalled pesticide is not waste if the person conducting the recall has made a decision to use a management option that causes the pesticide to be exempt from regulation under § 7-204(a). This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.
  - (2) An unused pesticide product described in **subsection** (a)(3) of this section becomes a waste on the date the generator decides to discard it.

## § 7-904 APPLICABILITY TO MERCURY THERMOSTATS

- (a) The requirements of this subchapter apply to persons managing thermostats, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused thermostats become waste on the date the handler decides to discard them.

## § 7-905 APPLICABILITY TO PCB-CONTAINING FLUORESCENT LIGHT BALLASTS

- (a) The requirements of this subchapter apply to persons managing intact and non-leaking fluorescent light ballasts with small capacitors that contain PCBs (the terms "fluorescent light ballast", "PCB", and "small capacitor" are defined in § 7-911), and that are hazardous waste due to meeting the criteria of only the VT01 hazardous waste code identified in § 7-211 of these regulations.
- (b) Both used and unused PCB-containing fluorescent light ballasts become waste on the date the handler decides to discard them.

**Note:** Various PCB-containing devices (including leaking waste fluorescent light ballasts of any size) and the disposal of the potting material in ballasts with a concentration of PCBs over 50 parts per million are subject to federal regulation under TSCA (40 CFR Part 761).

# § 7-906 APPLICABILITY TO LAMPS

- (a) The requirements of this subchapter apply to persons managing lamps, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused lamps become waste on the date the handler decides to discard them.

# § 7-907 APPLICABILITY TO MERCURY-CONTAINING DEVICES

- (a) The requirements of this subchapter apply to persons managing mercury-containing devices, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused mercury-containing devices become waste on the date the handler decides to discard them.

# § 7-908 APPLICABILITY TO CATHODE RAY TUBES (CRTS)

- (a) The requirements of this subchapter apply to persons managing CRTs, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused CRTs become waste on the date the handler decides to discard them.

- (c) CRTs that have been collected, but still must be evaluated for reuse or repair (i.e., considered a commodity) are not waste provided:
  - (1) The CRTs are managed to prevent breakage and cosmetic damage;
  - (2) The CRTs remain intact;
  - (3) The CRTs are stored within a structure or transportation unit such that the CRTs are protected from precipitation; and
  - (4) The person in control of the CRTs plans to evaluate the CRTs for reuse or repair onsite, or send the CRTs off-site for such evaluation.
- (d) CRTs that have been evaluated under **subsection** (c) of this section become waste on the date the handler determines that they cannot be reused or repaired.

# § 7-909 APPLICABILITY TO POSTCONSUMER PAINT

- (a) The requirements of this subchapter apply to persons managing postconsumer paints, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) The requirements of this subchapter apply to postconsumer paint that is collected as part of a stewardship plan approved under 10 V.S.A. § 6680.
- (c) Both used and unused postconsumer paints become waste on the date the handler decides to discard them.

# § 7-910 APPLICABILITY TO AEROSOL CANS

- (a) The requirements of this subchapter apply to persons managing aerosol cans, as defined in § 7-911, except those listed in subsection (b) of this section.
- (b) The requirements of this subchapter do not apply to persons managing the following types of aerosol cans:
  - (1) Aerosol cans that are not yet waste. **Subsection (c) of this section** describes when an aerosol can becomes a waste;
  - (2) Aerosol cans that are not hazardous waste. An aerosol can is a hazardous waste if the aerosol can exhibits one or more of the characteristics identified by §§ 7-205 through 7-208 or the aerosol can contains a substance that is listed in §§ 7-210 through 7-215; and

- (3) Aerosol cans that meet the standard for empty containers under § 7-203(j).
- (c) Generation of waste aerosol cans.
  - (1) A used aerosol can becomes a waste on the date it is discarded.
  - (2) An unused aerosol can becomes a waste on the date the handler decides to discard it.

# § 7-911 DEFINITIONS

Terms defined in § 7-103 of these regulations or in 40 CFR Parts 260 through 270 have the same meaning when used in this subchapter.

- "Aerosol can" means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.
- "Architectural paint" means interior and exterior architectural coatings, including interior or exterior water- and oil-based coatings, primers, sealers, or wood coatings, that are sold in containers of five gallons or less. "Architectural paint" does not mean industrial coatings, original equipment coatings, or specialty coatings.
- "Battery" means a device consisting of one or more electrically connected electrochemical cells which 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.
- "Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the video display component of a television, computer monitor, or other electronic display device.
- "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 7-912(d)(3). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.
- "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. §§ 136 et seq..
- "Fluorescent light ballast" means a device that electrically controls fluorescent light fixtures (i.e., provides starting voltage and stabilizes electrical current) and that includes a capacitor containing 0.1 kg or less of dielectric material.
- "Lamp" means the bulb or tube portion of an electric lighting device specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the

electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

"Large quantity handler" means a universal waste handler who accumulates 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, mercury-containing devices, post-consumer paint, or aerosol cans, calculated collectively), or who accumulates 36,288 kilograms (40 tons) or more of CRTs, at any time. This designation as a large quantity handler is retained through the end of the calendar year in which either 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs, or 40 tons or more of CRTs, is accumulated.

"Mercury-containing device" means a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation.

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

"Pesticide" means 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, other than any article that:

- (a) Is a new animal drug under the Federal Food, Drug, and Cosmetic Act (FFDCA) section 201(w); or
- (b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug; or
- (c) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by subsections (a) or (b) of this definition.

"Postconsumer paint" means architectural paint and its containers not used and no longer wanted by a purchaser.

"Small quantity handler" means a universal waste handler who does not accumulate 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, mercury-containing devices, postconsumer paint, or aerosol cans, calculated collectively), and who does not accumulate 36,288 kilograms (40 tons) or more of CRTs, at any time.

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of § 7-912(d)(3)(B).

"TSCA" means the Toxic Substances Control Act, 15 U.S.C. 2601 et seg.

"Universal waste" means any of the following hazardous wastes that are subject to the universal waste requirements of this subchapter:

- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;
- (f) Mercury-containing devices as described in § 7-907;
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and
- (i) Aerosol cans as described in § 7-910.

#### "Universal waste handler":

- (a) Means:
  - (1) A generator (as defined in § 7-103) of universal waste; or
  - (2) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
- (b) Does not mean:
  - (1) A person who treats, except under the provisions of § 7-912(d)(3), disposes of, or recycles (except under the provisions of § 7-912(d)(9)) universal waste; or
  - (2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"Universal waste transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

## § 7-912 STANDARDS FOR SMALL AND LARGE QUANTITY HANDLERS OF UNIVERSAL WASTE

(a) Applicability

This section applies to small and large quantity handlers of universal waste as defined above.

(b) Prohibitions

Small and large quantity handlers of universal waste are:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in **subsection** (h) of this section; or by managing specific wastes as provided in **subsection** (d) of this section.

**Note:** Intentional breaking or crushing of mercury-containing lamps is banned under this treatment prohibition.

**Note:** Owners or operators of facilities that treat mercury-containing lamps using drumtop crushing equipment are subject to certification under the requirements of **subchapter** 5. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

# (c) Notification

- (1) A small quantity handler is not required to notify the Secretary of universal waste handling activities.
- (2) A large quantity handler must notify the Secretary as follows:
  - (A) Except as provided in **subsection** (c)(2)(B) of this section, a large quantity handler must have sent written notification of universal waste management to the Secretary, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.
  - (B) A large quantity handler who manages recalled universal waste pesticides as described in §§ 7-903(a)(1) and (a)(2) and who has sent notification to EPA as required by 40 CFR Part 165 is not required to notify for those recalled universal waste pesticides under this section.
- (3) A notification submitted by a large quantity handler must include:
  - (A) The large quantity handler's name and mailing address;

- (B) The name and business telephone number of the person at the large quantity handler's site who should be contacted regarding universal waste management activities;
- (C) The address or physical location of the universal waste management activities;
- (D) A list of all of the types of universal waste managed by the large quantity handler;
- (E) A statement indicating that the large quantity handler is either accumulating 5,000 kilograms or more of universal waste other than CRTs, or 36,288 kilograms (40 tons) or more of CRTs, at one time and the types of universal waste the handler is accumulating above this quantity.

**Note:** The **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) specified under § **7-104** may be used to provide notification of universal waste management to the Secretary.

- (d) Waste management
  - (1) [Reserved]
  - (2) Universal waste pesticides
    - (A) Both small and large quantity handlers must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:
      - (i) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
      - (ii) A container that does not meet the requirements of subsection (d)(2)(A)(i) of this section, provided that the unacceptable container is overpacked in a container that does meet the subsection (d)(2)(A)(i) requirements; or
      - (iii) A tank that meets the requirements of 40 CFR Part 265 subpart J, except for 40 CFR §§ 265.197(c), 265.200, and 265.201; or
      - (iv) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
    - (B) Store containers of universal waste pesticides within a structure such that the containers are protected from precipitation.

# (3) Universal waste thermostats

Both small and large quantity handlers must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste thermostats in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the thermostats. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Store containers of universal waste thermostats within a structure such that the containers are protected from precipitation.
- (C) A small or large quantity handler may remove mercury-containing ampules from universal waste thermostats, provided the handler:
  - (i) Removes the ampules in a manner designed to prevent breakage of the ampules;
  - (ii) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
  - (iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from the containment device to a container that is subject to all applicable requirement of **subchapters 1 through 7 of these regulations**;
  - (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that is subject to all applicable requirement of **subchapters 1 through 7 of these regulations**;
  - (v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
  - (vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
  - (vii) Stores removed ampules in closed, non-leaking containers that are in good condition;
  - (viii) Stores containers of removed appropriation; and structure such that the containers are protected from precipitation; and

- (ix) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.
- (D) A small or large quantity handler who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in §§ 7-205 through 7-208:
  - (i) Mercury or clean-up residues resulting from spills or leaks; and/or
  - (ii) Other waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).
- (E) Any mercury, residue, and/or other waste listed in **subsection** (d)(3)(D) of this section that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.
- (4) Universal waste PCB-containing fluorescent light ballasts

Small and large quantity handlers must:

- (A) Manage universal waste PCB-containing fluorescent light ballasts in a way that prevents releases of any universal waste or component of a universal waste to the environment.
- (B) Immediately contain and transfer any universal waste PCB-containing fluorescent light ballasts that show evidence of leakage or damage to a container that meets the requirements of §§ 7-311(f)(2) through (4).

**Note:** Fluorescent light ballasts which contain PCBs in a small capacitor that is either not intact or that is leaking, or that contain PCBs in the potting material, are subject to regulation under TSCA (i.e., 40 CFR Part 761).

- (C) Store universal waste PCB-containing fluorescent light ballasts within a structure such that the ballasts are protected from precipitation.
- (5) Universal waste lamps
  - (A) Both small and large quantity handlers must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment. Small and large quantity handlers must:
    - (i) Package universal waste lamps in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers must remain closed and must lack evidence of leakage,

- spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (ii) Store containers of universal waste lamps within a structure such that the containers are protected from precipitation.
- (iii) Seal full containers with tape.
- (iv) Stack containers of lamps no higher than five (5) feet.
- (v) Immediately contain and transfer any universal waste lamps that show evidence of damage, and all residue and other waste from broken lamps to a container that meets the requirements of §§ 7-311(f)(2) through (4).

Note: Intentional breaking or crushing of mercury-containing lamps is prohibited under § 7-912(b)(2).

**Note:** Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of **subchapter 5**. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (B) A small or large quantity handler must determine whether residue and/or other waste from broken lamps collected pursuant to subsection (d)(5)(A)(v) of this section exhibits a characteristic of hazardous waste identified in §§ 7-205 through 7-208.
- (C) Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.
- (6) Universal waste mercury-containing devices

Both small and large quantity handlers must manage universal waste mercurycontaining devices in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste mercury-containing devices in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the devices. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Store containers of universal waste mercury-containing devices within a structure such that the containers are protected from precipitation.

- (C) A small or large quantity handler may remove mercury-containing ampules from universal waste mercury-containing devices, provided the handler adheres to the practices for removing mercury containing ampules from universal waste thermostats set forth in subsections (d)(3)(C) through (E) of this section.
- (D) Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.
- (7) Universal waste cathode ray tubes (CRTs)

Both small and large quantity handlers must manage universal waste CRTs in a way that prevents breakage, or releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste CRTs in a manner adequate to prevent breakage during transportation, and when necessary during storage and handling. Such packaging must lack evidence of damage that could cause breakage under reasonably foreseeable conditions;
- (B) Store universal waste CRTs within a structure or transportation unit such that the CRTs are protected from precipitation; and
- (C) Place any universal waste CRT that shows evidence of breakage, leakage, spillage, or damage that could cause the release of glass particles under reasonably foreseeable conditions in a container. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube(s) and shall be capable of preventing leakage, spillage or releases of broken cathode ray tubes, glass particles or other hazardous constituents from such broken tubes to the environment.

# (8) Postconsumer paint

Both small and large quantity handlers must manage universal waste postconsumer paint in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste postconsumer paint shall be managed in containers that remain closed, structurally sound, and compatible with the postconsumer paint. Such containers must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Any container of universal waste postconsumer paint that does not meet the requirements of **subsection** (A) of this section shall be overpacked in a container

that meets the requirements of subsection (A) of this section.

(C) Store containers of universal waste postconsumer paint within a structure such that the containers are protected from precipitation.

# (9) Aerosol cans

Both small and large quantity handlers must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste aerosol cans must be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.
- (B) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of **subsection (D) of this section**.
- (C) Small and large quantity handlers of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:
  - (i) Sorting aerosol cans by type;
  - (ii) Mixing intact cans in one container; and
  - (iii) Removing actuators to reduce the risk of accidental release, and
- (D) A small or large quantity handler of universal waste who punctures and drains their aerosol cans must recycle the empty punctured aerosol cans and meet the following requirements while puncturing and draining universal waste aerosol cans:
  - (i) Conduct puncturing and draining activities using a device specifically designed to safely puncture aerosol cans and effectively contain the residual contents and any emissions thereof.
  - (ii) Establish and follow a written procedure detailing how to safely puncture and drain the universal waste aerosol can (including proper assembly, operation and maintenance of the unit, segregation of incompatible wastes, and proper waste management practices to prevent fires or releases); maintain a copy of the manufacturer's specification and instruction on site; and ensure employees operating the device are trained in the proper procedures.

- (iii) Ensure that puncturing of the can is done in a manner designed to prevent fires and to prevent the release of any component of universal waste to the environment. This manner includes, but is not limited to, locating the equipment on a solid, flat surface in a well-ventilated area.
- (iv) Immediately transfer the contents from the waste aerosol can or puncturing device, if applicable, to a container or tank that meets the applicable requirements of §§ 7-306, 7-307, 7-308, or 7-310.
- (v) Conduct a hazardous waste determination on the contents of the emptied aerosol can per § 7-303. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of subchapters 1 through 7. The handler is considered the generator of the hazardous waste and is subject to the applicable requirements of subchapter 3.
- (vi) If the contents are determined to be nonhazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.
- (vii) A written procedure must be in place in the event of a spill or leak and a spill clean-up kit must be provided. All spills or leaks of the contents of the aerosol cans must be cleaned up promptly.
- (e) Labeling and marking

Small and large quantity handlers must label and mark universal waste to identify its type as specified below:

- (1) [Reserved]
- (2) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in §§ 7-903(a)(1) and (2) are contained must be labeled and marked clearly with:
  - (A) The label that was on or accompanied the product as sold or distributed; and
  - (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (3) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in § 7-903(a)(3) are contained must be labeled and marked clearly with:
  - (A) A label as follows:
    - (i) The label that was on the product when purchased, if still legible;

- (ii) If using the labels described in **subsection (i) of this section** is not feasible, the appropriate label as required under the Department of Transportation regulation **49 CFR Part 172**;
- (iii) If using the labels described in **subsections (i) and (ii) of this section** are not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
- (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (4) Containers holding universal waste thermostats must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
- (5) Universal waste PCB-containing fluorescent light ballasts (i.e., each ballast), or a container in which the ballasts are contained, must be labeled or marked clearly with one of the following phrases: "Universal Waste-PCB Ballast(s)," or "Waste PCB Ballast(s)," or "Used PCB Ballast(s)."
- (6) Containers holding universal waste lamps must be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."
- (7) Containers holding universal waste mercury-containing devices must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Device(s)," or "Waste Mercury Device(s)," or "Used Mercury Device(s)."
- (8) Universal waste cathode ray tubes (i.e., each CRT), or packages or containers holding universal waste cathode ray tubes, must be labeled or marked clearly with one of the following phrases: "Universal Waste-Cathode Ray Tube(s)," or "Waste Cathode Ray Tube(s)," or "Used Cathode Ray Tube(s)" or "Universal Waste-CRT(s)," or "Waste CRT(s)," or "Used CRT(s)."
- (9) Containers holding universal waste postconsumer paint must be labeled or marked clearly with one of the following phrases: "Universal Waste-Paint," or "Used Paint."
- (10) Universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste—Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)".

#### (f) Accumulation time limits

(1) A small or large quantity handler may not accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another

handler, unless the requirements of subsection (f)(2) of this section are met.

- A small or large quantity handler may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (3) A small or large quantity handler who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
  - (A) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
  - (B) Marking or labeling each individual item of universal waste (e.g., each thermostat, ballast or lamp) with the date it became a waste or was received;
  - (C) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
  - (D) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
  - (E) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
  - (F) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.
- (g) Employee training

Both small and large quantity handlers must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

- (h) Response to releases
  - (1) Both small and large quantity handlers must respond to and manage a discharge or release of a universal waste in accordance with the requirements and procedures of §

#### 7-105.

(2) Both small and large quantity handlers must determine whether any material resulting from the discharge or release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the material resulting from the discharge or release, and must comply with the applicable requirements of **subchapter 3**.

# (i) Off-site shipments

- (1) Both small and large quantity handlers of universal waste are prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- (2) If a small or large quantity handler self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of § 7-913 while transporting the universal waste.
- (3) If a universal waste being offered for off-site transportation meets the definition of a hazardous material under 49 CFR Parts 171 through 180, the small or large quantity handler must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180;
- (4) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
- (5) If a small or large quantity handler sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
  - (A) Receive the waste back when notified that the shipment has been rejected, or
  - (B) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (6) Small and large quantity handlers may reject a shipment containing universal waste, or a portion of a shipment containing universal waste received from another handler. If a handler rejects a shipment or a portion of a shipment, the handler must contact the originating handler to provide notification of the rejection and to discuss reshipment of the load. The handler must:
  - (A) Send the shipment back to the originating handler, or

- (B) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (7) If a small or large quantity handler receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the originating shipper.
- (j) Tracking universal waste shipments
  - (1) A small quantity handler is not required to keep records of shipments of universal waste.
  - (2) A large quantity handler is subject to the following tracking requirements:
    - (A) Receipt of shipments

A large quantity handler must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:

- (i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
- (ii) The quantity of each type of universal waste received;
- (iii) The date of receipt of the shipment of universal waste.
- (B) Shipments off-site

A large quantity handler must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste sent must include the following information:

- (i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
- (ii) The quantity of each type of universal waste sent;
- (iii) The date the shipment of universal waste left the facility.

- (C) Record retention
  - (i) A large quantity handler must retain the records described in **subsection** (j)(2)(A) of this section for at least three years from the date of receipt of a shipment of universal waste.
  - (ii) A large quantity handler must retain the records described in **subsection** (j)(2)(B) of this section for at least three years from the date a shipment of universal waste left the facility.

# (k) Exports

- (1) Both small and large quantity handlers who send universal waste to a foreign destination are subject to the requirements of 40 CFR Part 262, Subpart H.
- (2) Cathode ray tubes (CRTs)
  - (A) Exporters of universal waste cathode ray tubes must comply with the export requirements of 40 CFR § 261.39(a)(5) and the export notification and recordkeeping requirements of 40 CFR § 261.41.
  - (B) Availability of information; confidentiality of information
    - (i) After June 26, 2018, no claim of business confidentiality may be asserted by any person with respect to information contained in cathode ray tube export documents prepared, used and submitted under 40 CFR §§261.39(a)(5) and 261.41(a), and with respect to information contained in hazardous waste export, import, and transit documents prepared, used and submitted under 40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71, whether submitted electronically into EPA's Waste Import Export Tracking System or in paper format.
    - EPA will make any cathode ray tube export documents prepared, used and submitted under 40 CFR §§261.39(a)(5) and 261.41(a), and any hazardous waste export, import, and transit documents prepared, used and submitted under 40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71 available to the public under this section when these electronic or paper documents are considered by EPA to be final documents. These submitted electronic and paper documents related to hazardous waste exports, imports and transits and cathode ray tube exports are considered by EPA to be final documents on March 1 of the calendar year after the related cathode ray tube exports or hazardous waste exports, imports, or transits occur.

## § 7-913 STANDARDS FOR UNIVERSAL WASTE TRANSPORTERS

(a) Applicability

This section applies to universal waste transporters (as defined in § 7-911).

(b) Prohibitions

A universal waste transporter is:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in § 7-913(e).
- (c) Waste management
  - (1) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR § 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the hazardous waste manifest requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
  - (2) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR § 173.2. As universal waste shipments do not require a manifest under 40 CFR Part 262, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".
  - (3) Universal waste transporters are subject to the solid waste permit requirements of 10 V.S.A § 6607a.
- (d) Storage time limits
  - (1) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
  - (2) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of § 7-912 of this subchapter while storing the universal waste.

# (e) Response to releases

- (1) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (2) A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of **subchapters 1 through 7**. If the waste is determined to be a hazardous waste, the transporter must manage such waste in accordance with the applicable generator requirements of **subchapter 3**.

# (f) Off-site shipments

- (1) A universal waste transporter is prohibited from transporting universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.
- (2) If the universal waste being shipped off-site meets the Department of Transportation's definition of a hazardous material under 49 CFR § 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR Part 172.

# (g) Exports

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of 40 CFR Part 262, Subpart H.

# § 7-914 STANDARDS FOR DESTINATION FACILITIES

# (a) Applicability

- (1) The owner or operator of a destination facility (as defined in § 7-911) is subject to all applicable requirements of subchapters 1, 2, 3, 5, 6 and 7.
- (2) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with the applicable requirements of **subchapter 6**.

# (b) Off-site shipments.

- (1) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or a foreign destination.
- (2) The owner or operator of a destination facility may reject a shipment containing

universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, the owner must contact the shipper to provide notification of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

- (A) Send the shipment back to the original shipper, or
- (B) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
- (3) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the shipper.
- (c) Tracking universal waste shipments
  - (1) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:
    - (A) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
    - (B) The quantity of each type of universal waste received; and
    - (C) The date of receipt of the shipment of universal waste.
  - (2) The owner or operator of a destination facility must retain the records described in **subsection (c)(1) of this section** for at least three years from the date of receipt of a shipment of universal waste.

## § 7-915 IMPORT REQUIREMENTS

Persons managing universal waste that is imported from a foreign country into the United States are subject to the requirements of 40 CFR Part 262 Subpart H and the applicable requirements of this section, immediately after the waste enters the United States, as indicated in subsections (a) through (c) of this section:

- (a) A universal waste transporter is subject to the universal waste transporter requirements of § 7-913.
- (b) A universal waste handler is subject to the small or large quantity handler requirements of

§ 7-912, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of § 7-914.

# § 7-916 PETITIONS TO INCLUDE OTHER WASTES AS UNIVERSAL WASTES UNDER THIS SUBCHAPTER

# (a) General

- (1) Except as provided in **subsection** (a)(4) of this section, any person seeking to add a hazardous waste or a category of hazardous waste to this subchapter may petition the Secretary for a regulatory amendment under this section.
- (2) To be successful, the petitioner must demonstrate to the satisfaction of the Secretary that regulation of the waste or category of waste under the provisions of this subchapter is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must address as many of the factors listed in **subsection (b) of this section** as are appropriate for the waste or waste category addressed in the petition.
- (3) The Secretary will evaluate petitions using the factors listed in **subsection** (b) of this **section**. The decision of whether or not to amend this subchapter will be based on the weight of evidence showing that regulation under this subchapter is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.
- (4) Hazardous waste pharmaceuticals are regulated under **subchapter 10** of these regulations and may not be added as a category of hazardous waste for management under this **subchapter**.
- (b) Factors for petitions to include other wastes as universal wastes
  - (1) The waste or category of waste, as generated by a wide variety of generators, is listed in §§ 7-210 through 7-215, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in §§ 7-205 through 7-208. (When a characteristic waste is added to the universal waste regulations of this subchapter by using a generic name to identify the waste category, the definition of universal waste in §§ 7-103 and 7-911 will be amended to include only the hazardous waste portion of the waste category.) Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of this subchapter;
  - (2) The waste or category of waste is not exclusive to a specific industry or group of

industries, and is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities);

- (3) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (4) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;
- (5) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to §§ 7-912(d), and 7-913(c); and/or applicable U.S. Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (6) Regulation of the waste or category of waste under this subchapter will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with **subchapters 1 through 7**.
- (7) Regulation of the waste or category of waste under this subchapter will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (8) Such other factors as may be appropriate.

## Subchapter 10: HAZARDOUS WASTE PHARMACEUTICALS

# § 7-1001 DEFINITIONS

The following definitions apply to this subchapter:

"Evaluated hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has been evaluated by a reverse distributor in accordance with 40 CFR § 266.510(a)(3) and will not be sent to another reverse distributor for further evaluation or verification of manufacture credit.

"Hazardous waste pharmaceutical" means a pharmaceutical that is a waste, as defined in § 7-103, and exhibits one or more characteristics identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215. A pharmaceutical is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it is legitimately used/reused (e.g., lawfully donated for its intended purpose) or reclaimed. An over-the-counter pharmaceutical, dietary supplement, or homeopathic drug is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it has a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for its intended purpose) or reclaimed.

"Healthcare facility" means any person that is lawfully authorized to:

- (a) Provide preventative, diagnostic, therapeutic, rehabilitative, maintenance or palliative care, and counseling, service, assessment or procedure with respect to the physical or mental condition, or functional status, of a human or animal or that affects the structure or function of the human or animal body; or
- (b) Distribute, sell, or dispense pharmaceuticals, including over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, or prescription pharmaceuticals. This definition includes, but is not limited to, wholesale distributors, third-party logistics providers that serve as forward distributors, military medical logistics facilities, hospitals, psychiatric hospitals, ambulatory surgical centers, health clinics, physicians' offices, optical and dental providers, chiropractors, long-term care facilities, ambulance services, pharmacies, long-term care pharmacies, mail-order pharmacies, retailers of pharmaceuticals, veterinary clinics, and veterinary hospitals. This definition does not include pharmaceutical manufacturers, reverse distributors, or reverse logistics centers.

"Household waste pharmaceutical" means a pharmaceutical that is a waste, as defined in § 7-103, but is excluded from being a hazardous waste under § 7-203(a).

"Long-term care facility" means a licensed entity that provides assistance with activities of daily living, including managing and administering pharmaceuticals to one or more individuals at the facility. This definition includes, but is not limited to, hospice facilities, nursing facilities, skilled nursing facilities, and the nursing and skilled nursing care portions of continuing care retirement communities. Not included within the scope of this definition are group homes,

independent living communities, assisted living facilities, and the independent and assisted living portions of continuing care retirement communities.

- "Non-creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that does not have a reasonable expectation to be eligible for manufacturer credit or a nonprescription hazardous waste pharmaceutical that does not have a reasonable expectation to be legitimately used/reused or reclaimed. This includes but is not limited to, investigational drugs, free samples of pharmaceuticals received by healthcare facilities, residues of pharmaceuticals remaining in empty containers, contaminated personal protective equipment, floor sweepings, and clean-up material from the spills of pharmaceuticals.
- "Non-hazardous waste pharmaceutical" means a pharmaceutical that is a waste, as defined in § 7-103, and is not listed in §§ 7-210 through 7-215, and does not exhibit a characteristic identified in §§ 7-205 through 7-208.
- "Non-pharmaceutical hazardous waste" means a waste, as defined in § 7-103, that is listed in §§ 7-210 through 7-215, or exhibits one or more characteristics identified in §§ 7-205 through 7-208, but is not a pharmaceutical, as defined in this section.
- "Pharmaceutical" means any drug or dietary supplement for use by humans or other animals; any electronic nicotine delivery system (e.g., electronic cigarette or vaping pen); or any liquid nicotine (e-liquid) packaged for retail sale for use in electronic nicotine delivery systems (e.g., pre-filled cartridges or vials). This definition includes, but is not limited to, dietary supplements, as defined by the Federal Food, Drug and Cosmetic Act; prescription drugs, as defined by 21 CFR § 203.3(y); over-the-counter drugs; homeopathic drugs; compounded drugs; investigational new drugs; pharmaceuticals remaining in non-empty containers; personal protective equipment contaminated with pharmaceuticals; and clean-up material from spills of pharmaceuticals. This definition does not include dental amalgam or sharps.
- "Potentially creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has a reasonable expectation to receive manufacturer credit and is:
- (a) In original manufacturer packaging (except pharmaceuticals that were subject to a recall);
- (b) Undispensed; and
- (c) Unexpired or less than one year past expiration date. The term does not include evaluated hazardous waste pharmaceuticals or nonprescription pharmaceuticals including, but not limited to, over-the-counter drugs, homeopathic drugs, and dietary supplements.
- "Reverse distributor" means any person that receives and accumulates prescription pharmaceuticals that are potentially creditable hazardous waste pharmaceuticals for the purpose of facilitating or verifying manufacturer credit. Any person, including forward distributors, third-party logistics providers, and pharmaceutical manufacturers, that processes prescription pharmaceuticals for the facilitation or verification of manufacturer credit is considered a reverse distributor.

# § 7-1002 APPLICABILITY

- (a) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
- (b) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, has the option of complying with § 7-1002(d) for the management of its hazardous waste pharmaceuticals as an alternative to complying with § 7-306 and the optional provisions of § 7-1005.
- (c) A healthcare facility or reverse distributor remains subject to all applicable hazardous waste regulations with respect to the management of its non-pharmaceutical hazardous waste.
- (d) With the exception of healthcare facilities identified in **subsection** (a) of this section, a healthcare facility is subject to the following in lieu of **subchapters 3 through 5**:
  - (1) Sections 7-1003 and 7-1006 through 7-1009 of this subchapter with respect to the management of:
    - (A) Non-creditable hazardous waste pharmaceuticals, and
    - (B) Potentially creditable hazardous waste pharmaceuticals if they are not destined for a reverse distributor.
  - (2) Sections 7-1003(a), 7-1004, 7-1006 through 7-1008, and 7-1010 of this subchapter with respect to the management of potentially creditable hazardous waste pharmaceuticals that are prescription pharmaceuticals and are destined for a reverse distributor.
- (e) A reverse distributor is subject to §§ 7-1006 through 7-1011 of this subchapter in lieu of subchapters 3 through 5 with respect to the management of hazardous waste pharmaceuticals.
- (f) Hazardous waste pharmaceuticals generated or managed by entities other than healthcare facilities and reverse distributors (e.g., pharmaceutical manufacturers and reverse logistics centers) are not subject to this subchapter. Other generators are subject to **Subchapter 3** for the generation and accumulation of hazardous wastes, including hazardous waste pharmaceuticals.
- (g) The following are not subject to **Subchapters 1 through 9**, except as specified:
  - (1) Pharmaceuticals that are not waste, as defined in § 7-103, because they are

- legitimately used/reused (e.g., lawfully donated for their intended purpose) or reclaimed.
- (2) Over-the-counter pharmaceuticals, dietary supplements, or homeopathic drugs that are not wastes, as defined in § 7-103, because they have a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for their intended purpose) or reclaimed.
- (3) Pharmaceuticals being managed in accordance with a recall strategy that has been approved by the Food and Drug Administration in accordance with **21 CFR part 7 subpart C**. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Food and Drug Administration approves the destruction of the recalled items.
- (4) Pharmaceuticals being managed in accordance with a recall corrective action plan that has been accepted by the Consumer Product Safety Commission in accordance with **16 CFR part 1115**. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Consumer Product Safety Commission approves the destruction of the recalled items.
- (5) Pharmaceuticals stored according to a preservation order, or during an investigation or judicial proceeding until after the preservation order, investigation, or judicial proceeding has concluded and/or a decision is made to discard the pharmaceuticals.
- (6) Investigational new drugs for which an investigational new drug application is in effect in accordance with the Food and Drug Administration's regulations in 21 CFR part 312. This subchapter does apply to the management of the investigational new drug after the decision is made to discard the investigational new drug or the Food and Drug Administration approves the destruction of the investigational new drug, if the investigational new drug is a hazardous waste.
- (7) Household waste pharmaceuticals, including those that have been collected by an authorized collector (as defined by the Drug Enforcement Administration), provided the authorized collector complies with the conditional exemption in §§ 7-1007(a)(2) and 7-1007(b).

# $\S$ 7-1003 Standards for Healthcare Facilities Managing Non-creditable Hazardous Waste Pharmaceuticals

- (a) Notification and withdrawal from this subchapter for healthcare facilities managing hazardous waste pharmaceuticals:
  - (1) Notification. A healthcare facility must notify the Secretary, using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), that it is a healthcare facility operating under this subchapter. A healthcare facility is not

- required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each site or EPA identification number.
- (A) A healthcare facility that already has an EPA identification number must notify the Secretary, using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
- (B) A healthcare facility that does not have an EPA identification number must obtain one by notifying the Secretary, using the **Hazardous Waste Handler Site**Identification Form (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
- (C) A healthcare facility must keep a copy of its notification on file for as long as the healthcare facility is subject to this subchapter.
- Withdrawal. A healthcare facility that operated under this subchapter but is no longer subject to this subchapter, because it is a very small quantity generator under § 7-306, and elects to withdraw from this subchapter, must notify the Secretary using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it is no longer operating under this subchapter. A healthcare facility is not required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each EPA identification number.
  - (A) A healthcare facility must submit the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) notifying that it is withdrawing from this subchapter before it begins operating under § 7-306.
  - (B) A healthcare facility must keep a copy of its withdrawal on file for three years from the date of signature on the notification of its withdrawal.
- (b) A healthcare facility must ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
- (c) A healthcare facility that generates a waste that is a non-creditable pharmaceutical must determine whether that pharmaceutical is a hazardous waste pharmaceutical (i.e., it

exhibits a characteristic identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215) in order to determine whether the waste is subject to this subchapter. A healthcare facility may choose to manage its non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals under this subchapter.

- (d) Standards for containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities.
  - (1) A healthcare facility must place non-creditable hazardous waste pharmaceuticals in a container that is structurally sound, compatible with its contents, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
  - (2) A healthcare facility that manages ignitable or reactive non-creditable hazardous waste pharmaceuticals, or that mixes or commingles incompatible non-creditable hazardous waste pharmaceuticals must manage the container so that it does not have the potential to:
    - (A) Generate extreme heat or pressure, fire or explosion, or violent reaction;
    - (B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
    - (C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
    - (D) Damage the structural integrity of the container of non-creditable hazardous waste pharmaceuticals; or
    - (E) Through other like means threaten human health or the environment.
  - (3) A healthcare facility must keep containers of non-creditable hazardous waste pharmaceuticals closed and secured in a manner that prevents unauthorized access to its contents.
  - (4) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals and non-hazardous non-creditable waste pharmaceuticals in the same container, except that non-creditable hazardous waste pharmaceuticals prohibited from being combusted because of the dilution prohibition of 40 CFR § 268.3(c) must be accumulated in separate containers and labeled with all applicable hazardous waste codes.
- (e) A healthcare facility must label or clearly mark each container of non-creditable hazardous waste pharmaceuticals with the phrase "Hazardous Waste Pharmaceuticals."
- (f) Maximum accumulation time for non-creditable hazardous waste pharmaceuticals at

healthcare facilities.

- (1) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals on site for one year or less without a permit or having interim status.
- A healthcare facility that accumulates non-creditable hazardous waste pharmaceuticals on-site must demonstrate the length of time that the non-creditable hazardous waste pharmaceuticals have been accumulating, starting from the date it first becomes a waste. A healthcare facility may make this demonstration by any of the following methods:
  - (A) Marking or labeling the container of non-creditable hazardous waste pharmaceuticals with the date that the non-creditable hazardous waste pharmaceuticals became a waste;
  - (B) Maintaining an inventory system that identifies the date the non-creditable hazardous waste pharmaceuticals being accumulated first became a waste;
  - (C) Placing the non-creditable hazardous waste pharmaceuticals in a specific area and identifying the earliest date that any of the non-creditable hazardous waste pharmaceuticals in the area became a waste.
- (g) The non-creditable hazardous waste pharmaceuticals generated by a healthcare facility are subject to the land disposal restrictions of 40 CFR Part 268. A healthcare facility that generates non-creditable hazardous waste pharmaceuticals must comply with the land disposal restrictions in accordance with 40 CFR § 268.7(a) requirements, except that it is not required to identify the hazardous waste codes on the land disposal restrictions notification.
- (h) A healthcare facility that sends a shipment of non-creditable hazardous waste pharmaceuticals to a designated facility with the understanding that the designated facility can accept and manage the waste, and later receives that shipment back as a rejected load in accordance with the manifest discrepancy provisions of 40 CFR § 264.72 or 40 CFR § 265.72 may accumulate the returned non-creditable hazardous waste pharmaceuticals on site for up to an additional 90 days provided the rejected or returned shipment is managed in accordance with subsections (d) and (e) of this section. Upon receipt of the returned shipment, the healthcare facility must:
  - (1) Sign either:
    - (A) Item 18c of the original manifest, if the original manifest was used for the returned shipment; or
    - (B) Item 20 of the new manifest, if a new manifest was used for the returned shipment;
  - (2) Provide the transporter a copy of the manifest;

- (3) Within 30 days of receipt of the rejected shipment, send a copy of the manifest to the designated facility that returned the shipment to the healthcare facility; and
- Within 90 days of receipt of the rejected shipment, transport or offer for transport the returned shipment in accordance with the shipping standards of § 7-1009(a).
- (i) Reporting by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
  - (1) Biennial reporting by healthcare facilities. Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a), with respect to non-creditable hazardous waste pharmaceuticals managed under this subchapter.
  - (2) Exception reporting by healthcare facilities for a missing copy of the manifest:
    - (A) For shipments from a healthcare facility to a designated facility.

If a healthcare facility does not receive a copy of the manifest with the signature of the owner or operator of the designated facility within 60 days of the date the non-creditable hazardous waste pharmaceuticals were accepted by the initial transporter, the healthcare facility must submit:

- (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
- (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.
- (B) For shipments rejected by the designated facility and shipped to an alternate facility.

If a healthcare facility does not receive a copy of the manifest for a rejected shipment of the non-creditable hazardous waste pharmaceuticals that is forwarded by the designated facility to an alternate facility (using appropriate manifest procedures), with the signature of the owner or operator of the alternate facility, within 60 days of the date the non-creditable hazardous waste was accepted by the initial transporter forwarding the shipment of non-creditable hazardous waste pharmaceuticals from the designated facility to the alternate facility, the healthcare facility must submit:

- (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
- (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts

taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.

- (3) Additional reports. The Secretary may require healthcare facilities to furnish additional reports concerning the quantities and disposition of non-creditable hazardous waste pharmaceuticals.
- (j) Recordkeeping by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
  - (1) A healthcare facility must keep a copy of each manifest signed in accordance with §§ 7-702(b)(2) through (5) for three years or until it receives a signed copy from the designated facility which received the non-creditable hazardous waste pharmaceuticals. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.
  - (2) A healthcare facility must keep a copy of each exception report for a period of at least three years from the date of the report.
  - (3) A healthcare facility must keep records of any test results, waste analyses, or other determinations made to support its hazardous waste determination(s) consistent with § 7-202(b)(6), for at least three years from the date the waste was last sent to on-site or off-site treatment, storage or disposal. A healthcare facility that manages all of its non-creditable non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals is not required to keep documentation of hazardous waste determinations.
  - (4) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
  - (5) All records must be readily available upon request by an inspector.
- (k) A healthcare facility must immediately contain all spills of non-creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with the requirements of this subchapter.
- (1) A healthcare facility may accept non-creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
  - (1) Is under the control of the same person (as defined in § 7-103) as the very small quantity generator healthcare facility that is sending the non-creditable hazardous waste pharmaceuticals off-site ("control," for the purposes of this section, means the power to direct the policies of the healthcare facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate healthcare

facilities on behalf of a different person as defined in § 7-103 of this chapter shall not be deemed to "control" such healthcare facilities) or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;

- (2) Is operating under this subchapter for the management of its non-creditable hazardous waste pharmaceuticals;
- (3) Manages the non-creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
- (4) Keeps records of the non-creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.

# § 7-1004 Standards for Healthcare Facilities Managing Potentially Creditable Hazardous Waste Pharmaceuticals

- (a) A healthcare facility that generates a waste that is a potentially creditable pharmaceutical must determine whether the potentially creditable pharmaceutical is a potentially creditable hazardous waste pharmaceutical (i.e., it is listed in §§ 7-210 through 7-215 or exhibits a characteristic identified in §§ 7-205 through 7-208). A healthcare facility may choose to manage its potentially creditable non-hazardous waste pharmaceuticals as potentially creditable hazardous waste pharmaceuticals under this subchapter.
- (b) A healthcare facility may accept potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
  - (1) Is under the control of the same person, as defined in § 7-103, as the very small quantity generator healthcare facility that is sending the potentially creditable hazardous waste pharmaceuticals off site, or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;
  - (2) Is operating under this subchapter for the management of its potentially creditable hazardous waste pharmaceuticals;
  - (3) Manages the potentially creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
  - (4) Keeps records of the potentially creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.
- (c) Healthcare facilities are prohibited from sending hazardous wastes other than potentially

- creditable hazardous waste pharmaceuticals to a reverse distributor.
- (d) Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a) with respect to potentially creditable hazardous waste pharmaceuticals managed under this subchapter.
- (e) Recordkeeping by healthcare facilities
  - (1) A healthcare facility that initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor must keep the following records (paper or electronic) for each shipment of potentially creditable hazardous waste pharmaceuticals for three years from the date of shipment:
    - (A) The confirmation of delivery; and
    - (B) The shipping papers prepared in accordance with 49 CFR Part 172 subpart C, if applicable.
  - (2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
  - (3) All records must be readily available upon request by an inspector.
- (f) A healthcare facility must immediately contain all spills of potentially creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as noncreditable hazardous waste pharmaceuticals in accordance with this subchapter.

# § 7-1005 HEALTHCARE FACILITIES THAT ARE VERY SMALL QUANTITY GENERATORS FOR BOTH HAZARDOUS WASTE PHARMACEUTICALS AND NON-PHARMACEUTICAL HAZARDOUS WASTE

- (a) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (b) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its hazardous waste pharmaceuticals off-site to another healthcare facility, provided:
  - (1) The receiving healthcare facility meets the conditions in § 7-1003(l) and § 7-1004(b), as applicable; or
  - (2) The very small quantity generator healthcare facility meets the conditions in § 7-306(c)(2)(d) and the receiving large quantity generator meets the conditions in § 7-308(d).

- (c) A long-term care facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may dispose of its hazardous waste pharmaceuticals (excluding contaminated personal protective equipment or clean-up materials) in an on-site collection receptacle of an authorized collector (as defined by the Drug Enforcement Administration) that is registered with the Drug Enforcement Administration provided the contents are collected, stored, transported, destroyed and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances.
- (d) A long-term care facility with 20 beds or fewer is presumed to be a very small quantity generator subject to § 7-306 for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste and not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the other optional provisions of this section. The Secretary has the responsibility to demonstrate that a long-term care facility with 20 beds or fewer generates quantities of hazardous waste that are in excess of the very small quantity generator limits as defined in § 7-103. A long-term care facility with more than 20 beds that operates as a very small quantity generator under § 7-306 must demonstrate that it generates quantities of hazardous waste that are within the very small quantity generator limits as defined by § 7-103.

### § 7-1006 Prohibition of Sewering Hazardous Waste Pharmaceuticals

All healthcare facilities (including very small quantity generators operating under § 7-306 in lieu of this subchapter) and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 CFR 403.5(b)(1).

§ 7-1007 CONDITIONAL EXEMPTIONS FOR HAZARDOUS WASTE PHARMACEUTICALS THAT ARE ALSO CONTROLLED SUBSTANCES AND HOUSEHOLD WASTE PHARMACEUTICALS COLLECTED IN A TAKE-BACK EVENT OR PROGRAM

- (a) Provided the conditions of **subsection** (b) of this section are met, the following are exempt from 40 CFR Parts 262 through 273:
  - (1) Hazardous waste pharmaceuticals that are also listed on a schedule of controlled substances by the Drug Enforcement Administration in **21 CFR Part 1308**, and
  - (2) Household waste pharmaceuticals that are collected in a take-back event or program, including those that are collected by an authorized collector (as defined by the Drug Enforcement Administration) registered with the Drug Enforcement Administration that commingles the household waste pharmaceuticals with controlled substances from an ultimate user (as defined by the Drug Enforcement Administration).

- (b) Conditions for exemption. The hazardous waste pharmaceuticals must be:
  - (1) Managed in compliance with the sewer prohibition of § 7-1006; and
  - (2) Collected, stored, transported, and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances; and
  - (3) Destroyed by a method that Drug Enforcement Administration has publicly deemed in writing to meet their non-retrievable standard of destruction or combusted at one of the following:
    - (A) A permitted large municipal waste combustor, subject to 40 CFR Part 62 subpart FFF or applicable state plan for existing large municipal waste combustors, or 40 CFR Part 60 subparts Eb for new large municipal waste combustors; or
    - (B) A permitted small municipal waste combustor, subject to 40 CFR Part 62 subpart JJJ or applicable state plan for existing small municipal waste combustors, or 40 CFR Part 60 subparts AAAA for new small municipal waste combustors; or
    - (C) A permitted hospital, medical and infectious waste incinerator, subject to 40 CFR Part 62 subpart HHH or applicable state plan for existing hospital, medical and infectious waste incinerators, or 40 CFR Part 60 subpart Ec for new hospital, medical and infectious waste incinerators.
    - (D) A permitted commercial and industrial solid waste incinerator, subject to 40 CFR Part 62 subpart III or applicable state plan for existing commercial and industrial solid waste incinerators, or 40 CFR Part 60 subpart CCCC for new commercial and industrial solid waste incinerators.
    - (E) A permitted hazardous waste combustor subject to 40 CFR Part 63 subpart EEE.

#### § 7-1008 RESIDUES OF HAZARDOUS WASTE PHARMACEUTICALS IN EMPTY CONTAINERS

- (a) A stock bottle, dispensing bottle, vial, or ampule (not to exceed 1 liter or 10,000 pills); or a unit-dose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container.
- (b) A syringe is considered empty and the residues are not regulated as hazardous waste under this subchapter provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter

- and any applicable federal, state, and local requirements for sharps containers and medical waste.
- (c) An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter, unless the IV bag held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1).
- (d) Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers must be managed as non-creditable hazardous waste pharmaceuticals under this subchapter, unless the container held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1) or (2). This includes, but is not limited to, residues in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.

§ 7-1009 Shipping Non-creditable Hazardous Waste Pharmaceuticals from a Healthcare Facility or Evaluated Hazardous Waste Pharmaceuticals from a Reverse Distributor

- (a) A healthcare facility must ship non-creditable hazardous waste pharmaceuticals and a reverse distributor must ship evaluated hazardous waste pharmaceuticals off-site to a designated facility (such as a permitted or interim status treatment, storage, or disposal facility) in compliance with:
  - (1) The following pre-transport requirements, before transporting or offering for transport off-site:
    - (A) Packaging. Package the waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Parts 173, 178, and 180.
    - (B) Labeling. Label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172 subpart E.
    - (C) Marking
      - (i) Mark each package of hazardous waste pharmaceuticals in accordance with the applicable Department of Transportation (DOT) regulations on hazardous materials under 49 CFR Part 172 subpart D;
      - (ii) Mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of

#### 49 CFR § 172.304:

HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Healthcare Facility's or Reverse distributor's Name and Address

Healthcare Facility's or Reverse distributor's EPA Identification Number

Manifest Tracking Number

- (iii) Lab packs that will be incinerated in compliance with 40 CFR § 268.42(c) are not required to be marked with EPA Hazardous Waste Code(s), except D004, D005, D006, D007, D008, D010, and D011, where applicable. A nationally recognized electronic system, such as bar coding or radio frequency identification, may be used to identify the EPA Hazardous Waste Code(s).
- (D) Placarding. Placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR Part 172 subpart F.
- (2) The manifest requirements of § 7-702, except that:
  - (A) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals is not required to list all applicable hazardous waste codes in Item 13 of EPA Form 8700-22.
  - (B) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals must write the word "PHRM" in Item 13 of EPA Form 8700-22.
- (b) A healthcare facility or reverse distributor that exports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to 40 CFR Part 262 subpart H.
- (c) Any person that imports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to **40** CFR Part **262** subpart H. A healthcare facility or reverse distributor may not accept imported non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals unless they have a permit or interim status that allows them to accept hazardous waste from off site.

§ 7-1010 Shipping Potentially Creditable Hazardous Waste Pharmaceuticals from a Healthcare Facility or a Reverse Distributor to a Reverse Distributor

(a) A healthcare facility or a reverse distributor who transports or offers for transport potentially creditable hazardous waste pharmaceuticals off-site to a reverse distributor

must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Part 171 through 180 for any potentially creditable hazardous waste pharmaceutical that meets the definition of hazardous material in 49 CFR § 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262. Because a potentially creditable hazardous waste pharmaceutical does not require a manifest, it is not considered hazardous waste under the Department of Transportation regulations.

- (b) Upon receipt of each shipment of potentially creditable hazardous waste pharmaceuticals, the receiving reverse distributor must provide confirmation (paper or electronic) to the healthcare facility or reverse distributor that initiated the shipment that the shipment of potentially creditable hazardous waste pharmaceuticals has arrived at its destination and is under the custody and control of the reverse distributor.
- (c) If a healthcare facility or reverse distributor initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor and does not receive delivery confirmation within 35 calendar days from the date that the shipment of potentially creditable hazardous waste pharmaceuticals was sent, the healthcare facility or reverse distributor that initiated the shipment must contact the carrier and the intended recipient (i.e., the reverse distributor) promptly to report that the delivery confirmation was not received and to determine the status of the potentially creditable hazardous waste pharmaceuticals.
- (d) A healthcare facility or reverse distributor that sends potentially creditable hazardous waste pharmaceuticals to a foreign destination must comply with the applicable sections of 40 CFR Part 262 subpart H, except the manifesting requirement of 40 CFR § 262.83(c), in addition to subsections (a) through (c) of this section.
- (e) Any person that imports potentially creditable hazardous waste pharmaceuticals into the United States is subject to **subsections** (a) **through** (c) **of this section** in lieu of **40 CFR Part 262 subpart H**. Immediately after the potentially creditable hazardous waste pharmaceuticals enter the United States, they are subject to all applicable requirements of this subchapter.

§ 7-1011 Standards for the Management of Potentially Creditable Hazardous Waste Pharmaceuticals and Evaluated Hazardous Waste Pharmaceuticals at Reverse Distributors

A reverse distributor may accept potentially creditable hazardous waste pharmaceuticals from off site and accumulate potentially creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals on site without a hazardous waste permit or without having interim status, provided that it complies with the requirements of **40 CFR § 266.510**.

# APPENDIX I

# Hazardous Wastes from Specific Sources

The following wastes are referred to in § 7-212 and are hazardous wastes from specific sources.

Industry		Hazard
EPA Hazardous Waste Code	rdous	
Wood preserv	ation:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic pigr	nents:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
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 chem	icals:	
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 the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	
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)

Industry		
EPA Hazardous Waste Code	Hazardous Waste	Hazard Code
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 methy 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 1,1,1-trichloroethane.	(T)
K029	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 aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho- xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho- xylene.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	

Industry		
EPA Hazardous Waste Code	Hazardous Waste	Hazard Code
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I,T)
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 production of ethylene dibromide via bromination of ethene.	(T)
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)

EPA Hazardous Waste Code	Hazardous Waste	
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.).	
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.).	
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer including sludges that 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 chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)

Industry		
EPA Hazardous Waste Code	Hazardous Waste	
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 40 CFR § 261.32(c) that are equal to or greater than the corresponding 40 CFR § 261.32(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 40 CFR § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units	
Inorganic cher	nicals:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
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).	
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)
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)

Industry		
EPA Hazardous Waste Code	Hazardous Waste	
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 ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic 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)
<b>Explosives:</b>		
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)
Petroleum refi	ning:	

Industry		
EPA Hazardous Waste Code	Hazardous Waste	
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).	
Iron and steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)
Primary alum	inum:	
K088	Spent potliners from primary aluminum reduction.	(T)
Secondary lead	d:	
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.	
Veterinary ph	armaceuticals:	
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)

Industry		
EPA Hazardous Waste Code		
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
Ink formulation	on:	
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)
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 sludges from coking operations).	
K142	Tar storage tank residues 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,	
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke byproducts produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms.	(T)

# APPENDIX II

# **Hazardous Constituents**

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
A2213	Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminefluarone	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl]oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2-(methylsulfonyl) -, O- [(methylamino) carbonyl] oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propane, 3-chloro	107-05-1	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-3- isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2- methoxyaniline)	Benzenamine, 2-Methoxy-	90-04-0	
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S. <sup>1</sup>			
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic compounds, N.O.S. <sup>1</sup>			
Arsenic acid	Arsenic acid H3AsO4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As2O5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As2O3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S. <sup>1</sup>			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	22961-82-6	U364
Benomyl	Carbamic acid, [1- [(butylamino) carbonyl]- 1H-benzimidazol-2-yl] -, methyl ester	17804-35-2	U271
Benz[c]acridine	Same	225-51-4	U016
Benz[a]anthracene	Same	56-55-3	U018

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2	
Benzo[j]fluoranthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S. <sup>1</sup>			
Bis(pentamethylene)- thiuram tetrasulfide	Piperidine, 1,1[prime]- (tetrathiodicarbonothioyl)-bis-	120-54-7	
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Butylate	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008-41-5	
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S. <sup>1</sup>			
Calcium chromate	Chromic acid H2CrO4, calcium salt	13765-19-0	U032

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Calcium cyanide	Calcium cyanide Ca(CN)2	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Carbosulfan	Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	P189
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane (alpha and gamma isomers)			U036
Chlorinated benzenes, N.O.S. <sup>1</sup>			
Chlorinated ethane, N.O.S. <sup>1</sup>			
Chlorinated fluorocarbons, N.O.S. <sup>1</sup>			
Chlorinated naphthalene, N.O.S. <sup>1</sup>			
Chlorinated phenol, N.O.S. <sup>1</sup>			
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S. <sup>1</sup>			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta- Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o- Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S. <sup>1</sup>			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbama te	Copper, bis (dimethylcarbamodithioato-S,S')-,	137-29-1	
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120-71-8	
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Cyanides (soluble salts and complexes) N.O.S. <sup>1</sup>			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7	
Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	
2-Cyclohexyl-4,6- dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,4-D, salts, esters			U240
Daunomycin	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)-	20830-81-3	U059
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	
Dibenz[a,j]acridine	Same	224-42-0	
Dibenz[a,h]anthracene	Same	53-70-3	U063
7H- Dibenzo[c,g]carbazole	Same	194-59-2	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9	U064
1,2-Dibromo-3- chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S. <sup>1</sup>	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluorometha ne	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S. <sup>1</sup>	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'oxybis[2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis[2-chloro-	108-60-1	U027
Dichloromethoxy ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S. <sup>1</sup>	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S. <sup>1</sup>	Propanol, dichloro-	26545-73-3	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Dichloropropene, N.O.S. <sup>1</sup>	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	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)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O- pyrazinyl phosphoro- thioate	Phosphorothioic acid, O,O-diethyl O- pyrazinyl ester	297-97-2	P040
Diethylstilbesterol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophos phate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S- [2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'- Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p- Dimethylaminoazoben zene	Benzenamine, N,N-dimethyl-4- (phenylazo)-	60-11-7	U093

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	
7,12- Dimethylbenz[a]anthra cene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha,alpha- Dimethylphenethylami ne	Benzeneethanamine, alpha, alpha-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1- [(dimethylamino) carbonyl]-5-methyl-1H- pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S. <sup>1</sup>	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Di-n- propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide [(H2N)C(S)]2NH	541-53-7	P049
Endosulfan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	115-29-7	P050
Endothall	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	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,7aalpha)-	72-20-8	P051
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-[1-hydroxy-2- (methylamino)ethyl]-, (R)-	51-43-4	P042
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	
Ethylenebisdithiocarba mic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarba mic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Famphur	Phosphorothioic acid, O-[4- [(dimethylamino)sulfonyl]phenyl] O,O- dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamodithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl- N[prime]-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-6	U123
Formparanate	Methanimidamide, N,N-dimethyl-N[prime]-[2-methyl-4- [[(methylamino) carbonyl]oxy]phenyl]-	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S. <sup>1</sup>			
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a- hexa- hydro-, (1aalpha,1bbeta,2alpha,5alpha, 5abeta,6beta,6aalpha)-	1024-57-3	

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Heptachlor epoxide (alpha, beta, and gamma isomers)			
Heptachlorodibenzofur ans			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclopenta diene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofura ns			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyl tetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H2S	7783-06-4	U135
Indeno[1,2,3-cd]pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl n- butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro,(1alpha,4alpha,4abeta,5beta,8be ta,-8abeta) -	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen- 2-one, 1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-	143-50-0	U142
Lasiocarpine	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]]-	303-34-4	U143
Lead	Same	7439-92-1	
Lead compounds, N.O.S. <sup>1</sup>			•
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithiocarbama te	Manganese, bis(dimethylcarbamodithioato-S,S[prime])-,	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S. <sup>1</sup>			
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4	P065
Metam Sodium	Carbamodithioic acid, methyl-,monosodium salt	137-42-8	
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Methiocarb	Phenol, (3,5-dimethyl-4- (methylthio)-, methylcarbamate	2032-65-7	P199
Methomyl	Ethanimidothioic acid, N- [[(methylamino)carbonyl]oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methyl chlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis (2-chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	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)]	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Molinate	1H-Azepine-1-carbothioic acid, hexahydro, S-ethyl ester	2212-67-1	
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2	
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha- Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S. <sup>1</sup>			
Nickel carbonyl	Nickel carbonyl Ni(CO)4, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide Ni(CN)2	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO2	10102-44-0	P078

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydro-chloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N- oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S. <sup>1</sup>		35576-91-1	
N-Nitrosodi-n- butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N- Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N- Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N- Nitrosomethylethylami ne	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N- methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N- methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N- Nitrosomethylvinylami ne	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p- dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	
Octachlorodibenzofura n (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenofuran	39001-02-0	
Octamethylpyrophos- phoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO4, (T-4)-	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, 2- (dimethylamino)-N- [[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofur ans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenze ne (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
1,2-Phenylenediamine	1,2-Benzenediamine	95-54-5	
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S. <sup>1</sup>			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	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)	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S. <sup>1</sup>			
Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium dimethyldithiocarbama te	Carbamodithioic acid, dimethyl, potassium salt	128-03-0	
Potassium n- hydroxymethyl-n- methyl- dithiocarbamate	Carbamodithioic acid, (hydroxymethyl)methyl-,monopotassium salt	51026-28-9	
Potassium n- methyldithiocarbamate	Carbamodithioic acid, methyl- monopotassium salt	137-41-7	
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium	506-61-6	P099
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	<i>p</i>
Prosulfocarb	Carbamothioic acid, dipropyl-, S- (phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S. <sup>1</sup>			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS2	7488-56-4	U205
Selenium, tetrakis(dimethyl- dithiocarbamate)	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S. <sup>1</sup>			
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl, sodium salt	136-30-1	
Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-,sodium salt	148-18-5	
Sodium dimethyldithiocarbama te	Carbamodithioic acid, dimethyl-,sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, 2-deoxy-2- [[(methylnitrosoamino)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts		•	P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
1,2,4,5- Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p- dioxins			
Tetrachlorodibenzofura ns			
Tetrachloroethane, N.O.S. <sup>1</sup>	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2- Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2- Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6- Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-tetrachlorophen ol, potassium salt	same	53535276	None

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
2,3,4,6-tetrachlorophen ol, sodium salt	same	25567559	None
Tetraethyldithiopyroph os-phate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	,
Thallium compounds, N.O.S. <sup>1</sup>			
Thallic oxide	Thallium oxide Tl2O3	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'- [thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methylamino)carbonyl] oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophanate-methyl	Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-,dimethyl ester	23564-05-8	U409
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Thiram	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoro- methane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S. <sup>1</sup>		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(1- aziridinyl)phosphine sulfide	Aziridine, 1,1',1"- phosphinothioylidynetris-	52-24-4	
Tris(2,3- dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)]-bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V2O5	1314-62-1	P120
Vernolate	Carbamothioic acid, dipropyl-,S-propyl ester	1929-77-7	
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3%			U248
Warfarin salts, when present at concentrations greater than 0.3%			P001
Zinc cyanide	Zinc cyanide Zn(CN)2	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn3P2, when present at concentrations greater than 10%	1314-84-7	P122
Zinc phosphide	Zinc phosphide Zn3P2, when present at concentrations of 10% or less	1314-84-7	U249

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	Hazardous Waste Code
Ziram	Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-	137-30-4	P205

FOOTNOTE: <sup>1</sup>The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

## APPENDIX III

## Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either (Alphabetical by Substance)

The following hazardous wastes are referred to in § 7-214.

**Note:** 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.

Hazardous Waste Code	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	<sup>1</sup> 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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)
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
U202	<sup>1</sup> 81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
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)-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	<sup>1</sup> 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	<sup>1</sup> 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 H2CrO4, calcium salt

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	<sup>1</sup> 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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)

Hazardous Waste Code	Chemical Abstracts No.	Substance
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[prime]-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-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	<sup>1</sup> 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	Ethylidene 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 H2S
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)

Hazardous Waste Code	Chemical Abstracts No.	Substance
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,4,5,5,5a,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)

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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]-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 SeS2 (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

Hazardous Waste Code	Chemical Abstracts No.	Substance
U216	7791-12-0	Thallium chloride TlCl
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 [(H2N)C(S)]2S2, 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
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
U248	<sup>1</sup> 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 Zn3P2, when present at concentrations of 10% or less

FOOTNOTE: <sup>1</sup>CAS Number given for parent compound only.

## Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either

(Numerical by Hazardous Waste Code)

The following hazardous wastes are referred to in § 7-214.

Note: 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.

Hazardous Waste	Chemical Abstracts	Substance
Code	No.	
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 <sub>2</sub> CrO <sub>4</sub> , 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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-lyxo-hexopyranosyl)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)

Hazardous Waste Code	Chemical Abstracts No.	Substance
3040	1,00	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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	Diethylstilbesterol
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-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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)

Hazardous Waste Code	Chemical Abstracts No.	Substance
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U114	<sup>1</sup> 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U114	<sup>1</sup> 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-,
U129	58-89-9	(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- Lindane
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	77-47-4	Hexachlorocyclopentadiene

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 <sub>2</sub> 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,4,5,5,5a,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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
U201	108-46-3	Resorcinol
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 SeS <sub>2</sub> (R,T)
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]-
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, 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	<sup>1</sup> 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U240	<sup>1</sup> 94-75-7	2,4-D, salts & esters

Hazardous Waste Code	Chemical Abstracts No.	Substance
U243	1888-71-7	Hexachloropropene
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U244	137-26-8	Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , 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	<sup>1</sup> 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	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U249	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

<sup>&</sup>lt;sup>1</sup>CAS Number given for parent compound only.

### APPENDIX IV

# **Acutely Hazardous Wastes**

(Alphabetical by Substance)

The following list of acutely hazardous wastes is referred to in § 7-215.

**Note:** 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.

Hazardous Waste Code	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 H3AsO4
P012	1327-53-3	Arsenic oxide As2O3
P011	1303-28-2	Arsenic oxide As2O5
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-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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	<sup>1</sup> 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8beta)-
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)-
P051	<sup>1</sup> 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, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P191	644-64-4	Dimetilan
P047	<sup>1</sup> 534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb

Hazardous Waste Code	Chemical Abstracts No.	Substance
P085	152-16-9	Diphosphoramide, 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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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[prime])-,
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[prime]- [3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N[prime]- [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-Methyllactonitrile
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
P075	<sup>1</sup> 54-11-5	Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).
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 NO2
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 OsO4, (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	<sup>1</sup> 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)-, methylcarbamate
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
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

Hazardous Waste Code	Chemical Abstracts No.	Substance
P075	<sup>1</sup> 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).
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	<sup>1</sup> 57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	<sup>1</sup> 57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
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 Tl2O3
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 [(H2N)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-

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 V2O5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato- S,S[prime])-,
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN)2
P122	1314-84-7	Zinc phosphide Zn3P2, when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram

FOOTNOTE: <sup>1</sup>CAS Number given for parent compound only.

# **Acutely Hazardous Wastes**

(Numerical by Hazardous Waste Code)

The following list of acutely hazardous wastes is referred to in § 7-215.

**Note:** 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.

Hazardous Waste Code	Chemical Abstracts No.	Substance
P001	<sup>1</sup> 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	<sup>1</sup> 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

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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 <sub>3</sub> AsO <sub>4</sub>	
P011	1303-28-2	Arsenic oxide As <sub>2</sub> O <sub>5</sub>	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic oxide As <sub>2</sub> O <sub>3</sub>	
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) <sub>2</sub>	
P022	75-15-0	Carbon disulfide	
P023	107-20-0	Acetaldehyde, chloro-	

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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)-	

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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	<sup>1</sup> 534-52-1	4,6-Dinitro-o-cresol, & salts	
P047	<sup>1</sup> 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 [(H <sub>2</sub> N)C(S)] <sub>2</sub> 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	172-20-8	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, 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-	

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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,8beta)-	
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-Methyllactonitrile	
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) <sub>4</sub> , (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>	
P075	<sup>1</sup> 54-11-5	Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).	
P075	<sup>1</sup> 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies).	

Hazardous Waste Code	Chemical Abstracts No.	Substance
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 <sub>2</sub>
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 <sub>4</sub> , (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-

Hazardous Waste Code	Chemical Abstracts No.	Substance	
		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	<sup>1</sup> 157-24-9	Strychnidin-10-one, & salts	
P108	<sup>1</sup> 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 <sub>2</sub> O <sub>3</sub>	
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	

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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 <sub>2</sub> O <sub>5</sub>	
P120	1314-62-1	Vanadium pentoxide	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide Zn(CN) <sub>2</sub>	
P122	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , 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	

Hazardous Waste Code	Chemical Abstracts No.	Substance	
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)-, methylcarbamate	
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-(methyl-sulfonyl)-, 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	

FOOTNOTE: <sup>1</sup>CAS Number given for parent compound only.

# APPENDIX V- RESERVED



#### APPENDIX VI

#### Vermont Tax Codes

Unless one of the following tax codes apply, all manifested shipments of hazardous waste initiated in Vermont will be taxed at the rate specified in 32 VSA § 10103(a)(2). These tax codes must be entered into the Waste Codes section of the federal Uniform Hazardous Waste Manifest (Forms 8700-22 and 8700-22A (Rev. 3-05)) for a reduced tax rate or exemption to apply.

#### **SPECIAL TAX RATE CODES:**

**VX50** Aggregated Waste [32 VSA § 10103(a)(3)]

Hazardous waste destined for any form of management shall be taxed at the rate of 1.0 cent per pound, if all of the following apply:

- (A) it is shipped from a storage or collection facility for which financial responsibility is required and maintained under section 6605 or 6606 of Title 10 or the rules adopted under those sections:
- (B) it is not generated by the owner or operator of the storage or collection facility;
- (C) it has not been previously taxed in Vermont; and
- (D) it has not been held on-site for more than 180 days.

### **VX51** Recycling Rate [32 VSA § 10103(a)(1)]

Hazardous waste destined to be recycled for a beneficial purpose as defined in section 7-602 of these regulations, except if it meets the criteria for aggregated waste (VX50) above, shall be taxed at the rate of 11 cents per gallon of liquid or 1.4 cents per pound of solid.

#### **TAX EXEMPT CODES:**

The following wastes and materials are not subject to the tax imposed at 32 VSA § 10103(a):

VX60 Household Hazardous Waste (HHW) [VHWMR § 7-203(a)]

Household hazardous waste, including household waste that has been collected, transported, stored.

treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Household waste does not include hazardous waste generated at home-based businesses.

#### VX61 Federal Generators

Wastes generated by the federal government or federal governmental entities. This exemption generally does not apply to federal contractors.

### **VX62** Environmental Contingency Fund (ECF) [32 VSA § 10103(b)(1)]

Hazardous waste which is generated as a result of any action taken under section 1283 of Title 10 for which disbursements from the environmental contingency fund have been or will be made by the secretary.

### VX63 Internal Shipments

Internal shipments within captive storage facilities. Waste from captive storage facilities is taxed when it is shipped to an off-site designated facility.

#### **VX64** Previously Taxed Waste [32 VSA § 10103(b)(6)]

Hazardous waste that has been previously subject to the tax of 32 § VSA 10103, provided: (a) the person shipping the previously taxed waste has not held the waste for more than 180 days, and (b) if the waste has been mixed, the resulting mixture does not change the applicable U.S. Department of Transportation shipping description from that which applied before the waste was mixed.

### VX65 Imports from a Foreign Country [32 VSA § 10103(c)(2)]

Any person who initiates a manifest to import hazardous waste into Vermont from a foreign country shall not be required to pay a tax under 32 VSA § 10103(a).

### VX66 Redevelopment of Contaminated Properties Program (RCPP) [32 VSA § 10103(b)(7)]

Hazardous waste shipped in implementing a corrective action plan approved under 10 V.S.A. § 6615a, the redevelopment of contaminated properties program, provided that the secretary issues a certificate of completion, as provided under that section.

### **VX67** Specific Waivers [32 VSA § 10102(a)(2)]

Where the secretary of natural resources has determined, on a case-by-case basis, that this tax should not apply to a particular waste or generator.

**Note**: The VT99 Code should be used to describe non-hazardous wastes that do not require a unique identity on a manifest for either data tracking or tax purposes.

#### APPENDIX VII

### Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his or her wastes so that he or she can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a **Group A** material with a **Group B** material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Akaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime wastewater	Pickling liquor and other corrosive acids
Lime and water	Spent acid
Spent caustic	Spent mixed acid
	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

	Group 3-A	Group 3-B
Alcohols		Any concentrated waste in Groups 1-A or 1-B
Water		Calcium Lithium Metal hydrides Potassium SO <sub>2</sub> Cl <sub>2</sub> , SOCl <sub>2</sub> , PCl <sub>3</sub> , CH <sub>3</sub> SiCl <sub>3</sub> Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes Halogenated hydrocarbons Nitrated hydrocarbons Unsaturated hydrocarbons Other reactive organic compounds and solvents	Group 2-A wastes

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B	
Chlorates	Acetic acid and other organic acids	
Chlorine	Concentrated mineral acids	
Chlorites	Group 2-A wastes	
Chromic acid	Group 4-A wastes	
Hyphochlorites	Other flammable and combustible wastes	
Nitrates Nitric acid, fuming Perchlorates Permanganates Peroxides Other strong oxidizers		

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

# APPENDIX VIII

Reserved



# APPENDIX IX

# Basis for Listing Hazardous Waste

EPA Hazardous Waste Code	Hazardous constituents for which listed
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2 trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed)
F007	Cyanide (salts)
F008	Cyanide (salts)
F009	Cyanide (salts)
F010	Cyanide (salts)
F011	Cyanide (salts)
F012	Cyanide (complexed)
F019	Hexavalent chromium, cyanide (complexed)
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts

EPA Hazardous Waste Code	Hazardous constituents for which listed
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorbenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene
F025	Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans
F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F032	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene,indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.
F035	Arsenic, chromium, lead
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium
F038	Benzene, benzo(a)pyrene, chrysene, lead, chromium
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 40 CFR 268.43, Table CCW

EPA Hazardous Waste Code	Hazardous constituents for which listed
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene
K002	Hexavalent chromium, lead
K003	Hexavalent chromium, lead
K004	Hexavalent chromium
K005	Hexavalent chromium, lead
K006	Hexavalent chromium
K007	Cyanide (complexed), hexavalent chromium
K008	Hexavalent chromium
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde
K011	Acrylonitrile, acetonitrile, hydrocyanic acid
K013	Hydrocyanic acid, acrylonitrile, acetonitrile
K014	Acetonitrile, acrylamide
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride
K021	Antimony, carbon tetrachloride, chloroform
K022	Phenol, tars (polycyclic aromatic hydrocarbons)

EPA Hazardous Waste Code	Hazardous constituents for which listed
K023	Phthalic anhydride, maleic anhydride
K024	Phthalic anhydride, 1,4-naphthoquinone
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene
K026	Paraldehyde, pyridines, 2-picoline
K027	Toluene diisocyanate, toluene-2, 4-diamine
K028	1,1,1-trichloroethane, vinyl chloride
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride
K031	Arsenic
K032	Hexachlorocyclopentadiene
K033	Hexachlorocyclopentadiene
K034	Hexachlorocyclopentadiene
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene
K036	Toluene, phosphorodithioic and phosphorothioic acid esters
K037	Toluene, phosphorodithioic and phosphorothioic acid esters
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters
K039	Phosphorodithioic and phosphorothioic acid esters
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters
K041	Toxaphene
K042	Hexachlorobenzene, ortho-dichlorobenzene
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol
K044	N.A.
K045	N.A.
K046	Lead
K047	N.A.
K048	Hexavalent chromium, lead
K049	Hexavalent chromium, lead
K050	Hexavalent chromium
K051	Hexavalent chromium, lead

EPA Hazardous Waste Code	Hazardous constituents for which listed
K052	Lead
K060	Cyanide, napthalene, phenolic compounds, arsenic
K061	Hexavalent chromium, lead, cadmium
K062	Hexavalent chromium, lead
K069	Hexavalent chromium, lead, cadmium
K071	Mercury
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine
K084	Arsenic
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride
K086	Lead, hexavalent chromium
K087	Phenol, naphthalene
K088	Cyanide (complexes)
K093	Phthalic anhydride, maleic anhydride
K094	Phthalic anhydride
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane
K097	Chlordane, heptachlor
K098	Toxaphene
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol
K100	Hexavalent chromium, lead, cadmium
K101	Arsenic
K102	Arsenic
K103	Aniline, nitrobenzene, phenylenediamine
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol
K106	Mercury
K107	1,1-Dimethylhydrazine (UDMH)
K108	1,1-Dimethylhydrazine (UDMH)
K109	1,1-Dimethylhydrazine (UDMH)

EPA Hazardous Waste Code	Hazardous constituents for which listed
K110	1,1-Dimethylhydrazine (UDMH)
K111	2,4-Dinitrotoluene
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline
K114	2,4-Toluenediamine, o-toluidine, p-toluidine
K115	2,4-Toluenediamine
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene
K117	Ethylene dibromide
K118	Ethylene dibromide
K123	Ethylene thiourea
K124	Ethylene thiourea
K125	Ethylene thiourea
K126	Ethylene thiourea
K131	Dimethyl sulfate, methyl bromide
K132	Methyl bromide
K136	Ethylene dibromide
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene

EPA Hazardous Waste Code	Hazardous constituents for which listed
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylenechloride
K159	Benzene, butylate, eptc, molinate, pebulate, vernolate
K161	Antimony, arsenic, metam-sodium, ziram
K169	Benzene
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7, 12-dimethylbenz(a)anthracene
K171	Benzene, arsenic
K172	Benzene, arsenic
K174	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All tetrachlorodibenzo-p-dioxins), TCDFs (All tetrachlorodibenzofurans)
K175	Mercury
K176	Arsenic, Lead
K177	Antimony
K178	Thallium
K181	Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine

FOOTNOTE: N.A. -- Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.