

West Virginia
Department of Environmental Protection
Industrial Facility Closure Guidance Document

Revised July 2009

Purpose

Facility abandonment is a precursor to the creation of a Superfund site. These sites can cause environmental and human health hazards that can result in extremely high cleanup cost, health care cost and/or loss of habitat. In 1995 the West Virginia Department of Environmental Protection (WVDEP), Environmental Enforcement Section (EE) initiated a program of inspection to evaluate environmental impacts or potential impacts for industrial and manufacturing facilities, which are moving, closing, ceasing operations, or have been closed. The focus of this program is to insure that a facility does not leave contamination or other environmental problems that the State or Federal Government will have to deal with under CERCLA, Superfund, or similar program. This document is to provide guidance to facilities that fall under this program.

Definitions

Asbestos - means the asbestiform varieties of serpentinite, chrysotile, riebeckite, crocidolite, cummingtonite-grunerite, anthophyllite, and actinolite tremolite.(CSR 33.01.2.11)

Above Ground Storage Tank - means a device meeting the definition of “tank” in §260.10 and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.(40CFR Part 260.10)

Contaminant - means any material in a solid, liquid or gaseous state that has the potential to cause contamination. (CSR 47-58-2.1)

Department - means the Department of Environmental Protection (WV Code §22-1-2(2))

Director - means the Secretary of the Department of Environmental Protection or his or her designee. (WV Code §22-1-2(3))

Groundwater - means the water occurring in the zone of saturation beneath the seasonal high water table, or any perched water zones. (CSR 47-58-2.5)

Hazardous Waste - means a waste or combination of wastes, which because of its quantity, concentration or physical, chemical or infectious characteristics, may: (A) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. (WV Code §22-18-3(6))

Impoundment - means an area which is a natural topographic depression, man-made excavation, or diked area that is designed or improved in such a manner so as to hold an accumulation of contaminated surface runoff, process wastewater, product, or sewage, or any other liquid substance that could impact groundwater, but does not include any area used for secondary containment. (CSR 47-58-2.6)

Industrial Establishment - means any mill, factory, tannery, paper or pulp mill, mine, colliery, breaker or mineral processing operation, quarry, refinery, electric power generating facility, well, and each and every industry or plant or works, or activity in the operation or process of which industrial wastes, sewage, or other wastes are produced. Furthermore, any facility or activity not set forth above may be subject to any or all of the requirements of this rule at the director's discretion pursuant to section 5 of this rule. This definition does not include private or publicly owned sewage treatment operations. (CSR 47-58-2.7)

Lead Acid Batteries - means an encasement which contains or contained lead and sulfuric acid to produce an electrical charge. (CSR 33-04-2.1)

On Ground Tanks - means a device meeting the definition of "tank" in §260.10 and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.(40 CFR Part 260.10)

Open Dump - means any solid waste disposal which does not have a permit under this article, or is in violation of state law, or where solid waste is disposed in a manner that does not protect the environment. (WV Code §22-15-2(24))

Petroleum - means petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 lbs. per square inch absolute) and pipeline liquids. The term includes any refined petroleum products. (CSR 33-01-2.92)

Petroleum Contaminated Soil - means any soil, dirt, rock or other earthen material which contains more than a de minimis (100 ppm of total petroleum hydrocarbons or less) amount of petroleum and which is not a hazardous waste (CSR 33-01-2.93) or does not contain Polychlorinated biphenyls (PCBs) (40CSR761) above regulated levels.

Secondary Containment - means utilizing dikes, berms, synthetic or natural liner systems, double walled containment vessels, or any combination thereof to prevent contaminants from accidentally discharging into the environment. CSR 47-58-2.13)

Sewage Sludge - means solid, semi-solid or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage, scum or solids removed in primary, secondary or advanced wastewater treatment processes and a material derived from sewage sludge. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator. (CSR 33-02-2.41)

Sludge - means any solid, semi-solid, or liquid waste, or residue, or precipitate, generated from, or separated from or created by a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar source, exclusive of the treated effluent from a wastewater treatment plant. (CSR 33-01-2.118)

Solid Waste - means any garbage, paper, litter, refuse, cans, bottles, waste processed for the express purpose of incineration; sludge from a waste treatment plant; water supply treatment plant or air pollution control facility; and other discarded materials, including offensive or unsightly matter, solid, liquid, semisolid or contained liquid or gaseous material resulting from industrial, commercial, mining or community activities but does not include solid or dissolved material in sewage or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources and have permits under article five-a of this chapter, or source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, including any nuclear or byproduct material considered by federal standards to be below regulatory concern, or a hazardous waste either identified or listed under article five-e of this chapter or refuse, slurry, overburden or other wastes or material resulting from coal-fired electric power or steam generation, the exploration, development, production, storage and recovery of coal, oil and gas and other mineral resources placed or disposed of at a facility which is regulated under chapter twenty-two, twenty-two-a or twenty-two-b of this code, so long as placement or disposal is in conformance with a permit issued pursuant to such chapters. (WV Code §22-15-2(31))

Tanks - 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) which provide structural support. (40 CFR Part 260.10)

Underground Storage Tanks - means one tank or a combination of tanks, and the underground pipes connected thereto, which is used to contain an accumulation of regulated substances and the volume of which, including the volume of the underground pipes connected thereto, is ten percent or more beneath the surface of the ground, but does not include:(1) Farm or residential tanks with a capacity of eleven hundred gallons or less and used for storing motor fuel for noncommercial purposes. (WV Code §22-17-3(k))

Voluntary Remediation Program. - The program for the voluntary assessment and remediation of sites under the Voluntary Remediation and Redevelopment Act, W. Va. Code §22-22-1 et seq. (CSR 60-03-2.63)

Notification Requirements

90 Days Prior to Closing:

- Submit a notice of cessation of operations to WVDEP Office of Water and Waste Management – Permitting Section and Office of Environmental Enforcement – Compliance Monitoring Section. (See Appendix A)
- Designate a contact person responsible for addressing emergencies at the facility and providing WVDEP access to facility. (Contact person needs to be someone who will be available after the facility ceases operation and/or closes)

45 Days Prior to Closing

- Submit chemical inventory to WVDEP Environmental Enforcement Compliance Monitoring Section. Inventory should include all chemicals, chemical mixtures and liquid petroleum products.
- Submit a list of every tank (above ground, on the ground and underground), vat, electrical transformer and vessel that is currently at the site. If available, a list of any tank, vat, electrical transformer and vessel that has been removed from the site. List should include; a precise description of the location of each tank, vat, electrical transformer and vessel and an identification of the substances that are in or contaminate each receptacle.
- Submit a statement indicating whether any asbestos containing materials are present at the site.
- Submit a site drawing of all buildings, tanks, sumps, wells, and chemicals storage area

Upon receipt of the chemical and tank inventory, WVDEP will contact the designated representative to schedule a closure inspection. The inspection is designed to cover the site grounds including bulk storage areas, physical facilities (buildings, piping, etc.), storage tanks (above, on, and below ground), any existing well(s), bulk storage areas, in-ground pits and stormwater runoff areas. This will be a multi-media inspection, which may include personnel from Environmental Enforcements Water and Waste Section, Hazardous Waste Section, Underground Storage Tank Section and the Division of Air Quality.

Security Requirements

Upon closing the facility shall be secured to prevent unauthorized personnel from entering.

Entry Barriers

You must secure each outdoor location of operation against unauthorized entry by using *one or more* of the following methods:

- Board, lock or use other means to secure all windows, doors and other potential means of entry;
- Provide fencing
- Provide lighting and a surveillance system
- Provide security through the employment of a guard or security service;
- Demonstrate to the satisfaction of WVDEP that the proposed security measures secure

Warning Signs

You must post warning signs that prohibit trespassing in publicly visible locations. The signs must state:

“The building, structure, or outdoor location of operation contains or is contaminated with substances that may endanger public health or safety if released into the environment.”

Each warning sign also must comply with the following requirements:

- Warning signs near ignitable substances must include the language *No Smoking*
- All writing must be visible from at least 25 feet.
- Signs must be constructed to withstand weathering and be firmly affixed to secure against removal.

Within 90 days after closing

-Drain or remove all potential contaminants from each stationary vat, tank, electrical transformer, and vessel, and from all piping that is to remain at the facility. WVDEP understands it may be impractical in certain situations to remove a potential contaminate from a transformer that needs to remain energized.

-Remove from the facility all potential contaminants and debris, non-stationary equipment and furnishings, containers, and motor vehicles or rolling stock that are contaminated by doing any of the following:

- transfer them to an operating facility;
- sell them to another person;
- legally dispose of them.

-Certify to the WVDEP that all materials were dealt with properly by providing proper documentation. (i.e. manifests, invoices, receipts, etc.)

-Provide monthly progress reports of closure activities to the WVDEP.

Remediation

All contaminated areas, including soils, sediments and waters of the State, discovered during the inspection will have to be properly remediated. The WVDEP uses the following levels as guidelines for requirements to remediate contaminated soils: a) visible petroleum hydrocarbon staining, b) benzene(Method 8021B) greater than 0.05 mg/kg, c) BTEX(Method 8021B) greater than 10 mg/kg, or d) TPH-GRO plus TPH-DRO plus TPH-ORO (Method 8015) greater 100 mg/kg. This office requires all other contaminated areas to be cleaned to uncontaminated background levels determined from on-site samples unaffected from the facility's process. If the permittee finds contaminated areas that would be unable or unpractical to remediate to these levels, consideration should be given to the WVDEP's Voluntary Remediation Program (VRP). This program allows contaminated areas to be remediated to risk based levels depending on future use criteria. Partial areas can be entered into the VRP if needed. Information about the VRP can be found at www.wvdep.org and click on the Office of Remediation.

Failure or refusal to comply with the Closure Program may result in enforcement action being taken in accordance with Chapter 22, et.seq. of the WV Code
Upon successful completion of all remediation work to WVDEP standards, the facility may request a letter from WVDEP stating that all areas of concern indentified during the closure inspection process have been satisfactorily addressed. This request should be addressed to Joseph M. Sizemore, Assistant to the Chief Inspector of the WVDEP.

Appendix A

Addresses

WV Department of Environmental Protection
Division of Water and Waste Management
Environmental Enforcement
601 57th Street, SE
Charleston, WV 25304

WV Department of Environmental Protection
Division of Water and Waste Management
Permitting and Engineering Branch
601 57th Street, SE
Charleston, WV 25304

WV Department of Environmental Protection
Environmental Enforcement – Compliance Monitoring
P.O. Box 662
Teays, WV 25569