

# Modified Ohio Hazardous Waste Facility Installation and Operation Permit

Division of Environmental Response and Revitalization

Permittee: En	virosafe S	Services of Ohio Inc	U.S. EPA ID:	OHD045243706
Facility Name:	Envir	osafe Services of Ohio, Inc.		
Mailing Address	876 0	Otter Creek Road		
City: Oregon		State: Ohio Zip: 43616		
Operator Name	: Envir	osafe Services of Ohio, Inc.		
Mailing Address	876 0	Otter Creek Road		
City: Oregon		State: Ohio Zip: 43616		1
Facility Street Address:		876 Otter Creek Road		
City: Oregon		State: Ohio Zip: 43616		

#### **Permit Modification**

This Modified Ohio Hazardous Waste Facility Installation and Operation Permit is issued pursuant and subject to Section 3734.05(I) of the Ohio Revised Code and Rule 3745-50-51(D) of the Ohio Administrative Code.

The Ohio Hazardous Waste Facility Installation and Operation Permit for the facility with the above-referenced ID number as issued by the Ohio Environmental Protection Agency and journalized on September 30, 2016, and as subsequently modified by the Ohio Environmental Protection Agency, is hereby incorporated by reference in its entirety, except as it may be modified herein. This modification of the permit shall remain in effect until such time as the Ohio Hazardous Waste Facility Installation and Operation Permit is renewed, modified, withdrawn, suspended, or revoked.

The Permittee shall comply with all requirements of the modified permit application as amended or supplemented on May 14, 2018, and August 14, 2018. The information contained in the modified permit application is incorporated herein by reference. Specifically, all written statements regarding the specifications, locations, or capabilities of the processes, equipment, containment devices, safety devices or programs, or other matters made by the applicant in the permit modification application are hereby incorporated as express, binding terms and conditions of this modified permit.

The modified Terms and Conditions of this permit are attached hereto and are incorporated herein by reference. The modified Terms and Conditions supersede and replace the corresponding pages found in the September 30, 2016, renewal permit.

Pe	rmit	Mod	ificat	tion	An	nro	val
		11100	incu	LIGHT	np	piu	v ui

Entered into the Journal of the Director on:

Date:

#### **MODULE A - GENERAL PERMIT CONDITIONS**

#### A. GENERAL PERMIT CONDITIONS

# A.1 <u>Effect of Permit</u>

ORC Sections 3734.02 (E) and (F) and 3734.05 OAC Rule 3745-50-58(G)

- (a) The Permittee is authorized to treat, store, and/or dispose on-site hazardous waste in containers, tanks, a containment building, and landfill Cell M in accordance with the terms and conditions of this Ohio hazardous waste permit (hereinafter "permit"), ORC Chapter 3734, all applicable Ohio hazardous waste rules, all applicable regulations promulgated under the Resource Conservation and Recovery Act (RCRA), as amended, and the permit application. The renewal of the closed landfill Cells F, G, H and I is for the purpose of accomplishing closure and/or post-closure activities. These units shall not be reactivated for management of hazardous waste. The permit application, as submitted to Ohio EPA on June 29, 2015, and last updated on August 14, 2018, is hereby incorporated into this permit. In the instance of inconsistent language or discrepancies between the above, the language of the more stringent provision shall govern.
- (b) Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly authorized or specifically exempted by law. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights. Compliance with the terms and conditions of this permit does not obviate Permittee's obligation to comply with other applicable provisions of law governing protection of public health or the environment including but not limited to the Community Right-to-Know law under ORC Chapter 3750.

# A.2 <u>Permit Actions</u>

#### OAC Rule 3745-50-58(F)

This permit may be modified or revoked as specified by Ohio law. The filing of a request by the Permittee for a permit modification, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay any permit term or condition.

#### A.3 <u>Permit Effective/Expiration Date</u> OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director's Journal. The permit expiration date is ten years after the effective date.

### MODULE M – CELL M LANDFILL

# M. MODULE HIGHLIGHTS

The Permittee maintains and operates one active landfill known as Cell M and shown on Drawing PRMO-TO4 in Volume <u>DRWG</u> of the permit application. The scope of this permit module involves regulatory requirements for Cell M. Cell M, located south of York Street, was excavated and developed in a total of 3 phases. Cell M is approximately 25 acres at ground surface and extends approximately 45 feet below the original ground surface and is permitted for a maximum height of <u>120</u> feet (<u>714</u> msl) above the ground surface. Cell M was constructed with a multi-component bottom liner system that consists of a minimum of 9 feet of recompacted, engineered clay and multiple synthetic liners which is discussed in more detail below. The components of the liner and leachate collection systems are described in the Construction Quality Assurance report for Cell M, Phases 1, 2 and 3 Below Grade Liner Construction. Asbuilt details of Cell M excavation and the secondary clay liner are provided within the Cell M, Phases 1, 2 and 3 As-Built Drawings. The total capacity for Cell M is approximately <u>3.338</u> million cubic yards.

The bottom of Cell M was designed and constructed with a double liner system that includes the following components (listed from bottom to top):

- A secondary composite liner consisting of a minimum of 9 feet (and a maximum of 21 feet) of recompacted clay layer covered by a 60-mil High Density Polyethylene (HDPE) geomembrane liner.
- A leak detection and collection system above the secondary liner consisting of a geotextile covering a 12-inch aggregate drainage layer covering another geotextile and a HDPE geonet.
- A primary composite liner consisting of 2 feet of recompacted clay support layer covered by an 80-mil HDPE geomembrane liner.
- A leachate collection system (LCS) above the primary liner consisting of a geotextile, a 12-inch aggregate drainage layer, another geotextile and an HDPE geonet.

The internal sideslopes of Cell M were designed and constructed with a double liner system that includes the following:

- A secondary liner consisting of a minimum of 6.5 feet of recompacted clay layer covered by a 60mil HDPE geomembrane liner.
- A leak detection and collection system above the secondary liner consisting of a geonet.
- A primary liner consisting of an 80-mil HDPE geomembrane liner.
- A LCS above the primary liner consisting of a geotextile over a HDPE geomembrane geonet.

Liquids collected in the Cell M liner system drain to collection sumps. Liquids are pumped from the sumps through sideslope riser pipes and transported to the Leachate Storage Tank Building by tanker truck or a double walled force main pipe.

Drawing numbers PRMO-L06, L07, L08, L10, and L13 in the permit application provide details associated with the Cell M liner, final cover (or cap) design, and leachate tanker truck loading areas.

Site Staging Area O is located within the active area(s) of Cell M. Area O has a total staging capacity of 1,200 cubic yards. Also, some treatment processes (e.g., solidification, stabilization) could occur in tanks located within the landfill as described in Section D of the permit application. The Permittee operates four custom built open top welded steel tanks inside the perimeter dike of Cell M in the general location of Area O. The four tanks are identified as Landfill Tanks 1-4. A more detailed description of the tanks can be found in Appendix D.28 of the permit application and Module D of this permit.

The units located north of York Street, Cells F, G, H, and I, are closed and currently undergoing post closure care subject to the terms and conditions found in Module I of this permit. These cells are also shown on Drawing PRMO-T04 in Volume <u>DRWG</u> of the permit application.

# M.1 Landfill Waste Disposal Limitations

- (a) Subject to the conditions of this permit, the Permittee must dispose of only the hazardous wastes identified in Part A of the permit application and such other wastes as authorized by the Ohio hazardous waste rules or approved by Ohio EPA.
- (b) The Permittee must adhere to the Waste Acceptance Review (WAR) approval process described in Section C of the permit application.
- (c) Placement of wastes in Cell M must be no less than 100 feet from the respective center lines of York Street and Otter Creek Road, 70 feet from the facility boundary, and 40 feet from the City of Toledo's water lines.
- (d) The following wastes are prohibited from disposal in landfill cells:
  - (i) any wastes containing free liquids as determined in accordance with OAC Rule 3745-57-14, except lab packs;
  - (ii) water reactive or pyrophoric wastes, except as specified in OAC Rule 3745-57-12;
  - (iii) Class 1 explosives, as defined in 49 CFR 173.50(b)(1) and (2);

- (i) the maximum above-grade side slope must not exceed 33.33%;
- (ii) the slope of the final cover top surface must range from 3% to 5%; and,
- (iii) The maximum above-grade elevation must not exceed <u>120</u> feet (i.e., <u>714</u> feet above mean sea level) including the final cap thickness.
- (iv) All above grade side slopes must be designed to achieve a minimum deep-seated static slope stability factor of safety of 1.5 and a corresponding seismic factor of safety of 1.0.
- (c) The landfill must maintain both a leak detection/collection system and primary leachate collection and removal system in accordance with the plans contained in the permit application, Ohio hazardous waste rules, and the terms and conditions of this permit.
- (d) For each phase of landfill construction, the Permittee must have an independent, qualified, registered professional engineer monitor and examine the construction and certify, in accordance with OAC Rule 3745-50-42(D)(1), that construction is in accordance with the document, statements, designs, and plans contained in the permit application and the terms and conditions of this permit. Said engineer must be selected and paid for the Permittee and approved by Ohio EPA.
- (q) The Permittee must not dispose of waste in Cell M which will cause the global slope stability factor for static condition to fall below 1.5. To ensure that the global slope stability factor for static condition remains above 1.5, the Permittee must follow the testing protocol outlined in section D.4(f)(5) of the approved permit application.

#### M.3. Containment and Detection of Releases

- (a) The Permittee must monitor, operate, and maintain the primary leachate collection system (PLCS) and secondary leachate collection system (SLCS), as applicable, of Cell M.
  - (iv) The level of leachate accumulation on the primary synthetic liner, excluding the sumps, must not exceed the height of one foot, as required by OAC Rule 3745-57-30(A)(2), except for temporary excursions in Cell M when leachate infiltration rates temporarily exceed the capability of the PLCS pumps. Compliance will be evaluated in accordance with Permit Condition M.7(c).
  - (v) To minimize the potential for excursions, the Permittee must activate the PLCS pumps whenever the leachate levels on the liner exceed 10 inches above the primary liner as defined in Appendix D.5 for each sub-cell in Cell M.