# **Response to Comments**

For

# Wayne Disposal, Inc.

Hazardous Waste Management Facility Operating License Major Modification

And

Toxic Substances Control Act Polychlorinated Biphenyl Chemical Waste Landfill Approval Modification

March 2022

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY QUALITY



U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5



## OVERVIEW

This *Response to Comments* for Wayne Disposal, Inc. (WDI), is organized to summarize the comments received by the United States Environmental Protection Agency (U.S. EPA), and the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Materials Management Division (MMD), regarding the modification of the polychlorinated biphenyl (PCB) chemical waste landfill approval (Approval), and the major modification to the Hazardous Waste Management Facility Operating License (License) for WDI, respectively. The modification consists of a revised landfill liner design to incorporate the use of geosynthetic clay liners into the landfill liner system for Master Cell-VI Subcell G Phase 4 - 7 (MC-VI G4-G7), and MC-VI F1 – F4 at WDI's PCB and hazardous waste landfill, located at 49350 North I-94 Service Drive in Belleville, Michigan. The facility is bounded by Willow Run Airport to the north, and I-94 Service Drive to the south.

The comments were received as a result of a combined U.S. EPA, and EGLE public comment period from November 1, 2021, through December 30, 2021; and a public hearing held on December 1, 2021. The public hearing was conducted jointly by the U.S. EPA, and EGLE, to solicit public comment regarding the U.S. EPA's intent to modify the PCB Approval, and EGLE's intent to modify the License for WDI's hazardous waste landfill.

WDI operates a PCB and hazardous waste landfill for wastes that are generated at off-site facilities for disposal. The WDI Site #2 hazardous waste landfill consists of 120 acres divided into three Master Cells; MC-V, MC-VI, and MC-VII. MC-V, and MC-VII have already been filled, closed, and are currently in post-closure care. MC-VI is divided into seven subcells (A, B, C, D, E, F, and G). MC-VI subcells A, B, C, D, and E, have been filled, and have an interim final cover. MC-VI G is divided further into seven areas (G1, G2, G3, G4, G5, G6, and G7) and MC-VI F is divided into four areas (F1, F2, F3, and F4). WDI is currently filling MC-VI, G1 to G3. MC-VI G4-G7, and MC-VI F1-F4 have yet to be constructed. Since 1997, WDI has had approvals from the U.S. EPA to dispose of PCB waste in MC-VI. Since March 30, 1990, WDI has had operating licenses from EGLE to dispose of hazardous waste in the landfill.

Below are joint responses, from the U.S. EPA, and EGLE, to comments received during the public comment periods, and the public hearing. The comments are organized by the following topics: permitting process and public participation; landfill design and operations; and risk issues. The comments were carefully reviewed by the U.S. EPA, and EGLE, and responses to these comments are provided in this document. The comments did not result in changes to the proposed modification for either the PCB Approval, or for the License.

# FOR MORE INFORMATION

You are encouraged to review the *Response to Comments,* and the additional information about the WDI facility, at the information repository at:

Van Buren Township Hall 46425 Tyler Road Belleville, Michigan 48111 Michigan Department of Environment, Great Lakes, and Energy Materials Management Division Warren District Office 27700 Donald Court Warren, Michigan 48092 Mr. Todd Zynda Environmental Engineer ZyndaT@Michigan.gov 586-206-1640

If you have any questions, please feel free to contact either of the individuals listed below:

Ms. Christine Matlock Permit Engineer <u>MatlockC2@Michigan.gov</u> 517-290-4612 EGLE, MMD, Hazardous Waste Section P.O. Box 30241 Lansing, MI 48909-7741 Ms. Lisa Graczyk TSCA Project Manager <u>Graczyk.Lisa@EPA.gov</u> 312-353-3219 Land, Chemicals, and Redevelopment Division U.S. EPA Region 5 77 West Jackson Boulevard, LR-17J Chicago, IL 60604

# PERMITTING PROCESS AND PUBLIC PARTICIPATION

# COMMENT 1:

One commenter asked when WDI's License, and PCB Approval will be renewed.

# **RESPONSE:**

WDI's License expires on May 5, 2022, and they submitted a complete application to renew the License on November 5, 2021. EGLE is currently reviewing the application, and will notify those on the facility mailing list of any updates or public engagement opportunities. The PCB Approval expires on February 12, 2024. The U.S. EPA has also received the application to renew the PCB Approval.

## COMMENT 2:

One commenter asked what the best way was to understand all the applications and permits that WDI is applying for.

# **RESPONSE:**

The best way to stay up to date regarding EGLE licensing actions for WDI, is to receive electronic notifications. Residents may subscribe online to the US Ecology Michigan Disposal Waste Treatment Plant and Wayne Disposal, Inc. Hazardous Waste Landfill list through Michigan.gov/EGLEConnect.

EGLE maintains a website, <u>Michigan.gov/USEcologyWDI</u>, that allows the public to access and review information related to any current licensing actions. The public is also free to contact Ms. Christine Matlock with any questions, comments, or concerns. Contact information is found on Page 2 of this document.

The U.S. EPA also sets up a website when a public comment period opens for a PCB Approval. The U.S. EPA website allows the public to access and review information regarding the PCB Approval action, including the application materials. During the public comment period, the public is free to ask questions of the U.S. EPA. For this specific modification, the U.S. EPA website is <u>EPA.gov/PCBs/Wayne-Disposal-Inc-US-Ecology</u>, and any questions, comments, or concerns should be directed to Ms. Lisa Graczyk. Contact information is found on Page 2 of this document.

# COMMENT 3:

One commenter asked if there are other resources or nonprofit organizations that can help residents understand what WDI is requesting.

# **RESPONSE:**

In addition to the U.S. EPA, and EGLE websites, residents may contact Ms. Matlock, or Ms. Graczyk, regarding the WDI modification. EGLE offers assistance with general environmental questions though its Environmental Assistance Center at 1-800-662-9278, or its website <u>Michigan.gov/EGLE/0,9429,7-135-3307\_36106---</u>,00.html

# COMMENT 4:

One commenter expressed concern that the presentation was focused on the modification to the liner, and asked if the modification didn't also include an expansion to the volume of waste allowed, and new waste codes.

# **RESPONSE:**

The modification request was to change the landfill liner design to incorporate the use of geosynthetic clay liners for Master Cell-VI Subcell G Phase 4 - 7 (MC-VI G4-G7) and MC-VI F1 – F4. The public hearing focused solely on the evaluation of that request by the U.S. EPA, and EGLE.

# LANDFILL DESIGN AND OPERATIONS

# COMMENT 5:

One commenter asked if WDI accepts per- and polyfluoroalkyl substances (PFAS) waste, and further asked, if so, how many cubic yards per year is accepted.

# **RESPONSE:**

At this time, PFAS is not regulated as a hazardous waste or constituent under the Resources Conservation Recovery Act (RCRA) or the Toxic Substances Control Act (TSCA) PCB regulations, so WDI does not require approval to accept waste with PFAS, nor are they required to report related PFAS information to EGLE, or the U.S. EPA, in relation to their License or PCB Approval.

However, WDI is required to report PFAS information under U.S. EPA's Toxic Release Inventory (TRI) program. According to the TRI data from the reporting year 2020, the latest reporting year, WDI estimated that it disposed of 475.9 pounds of perfluorooctane sulfonic acid (PFOS), a PFAS chemical, in their landfill. The TRI data may be accessed online at <u>EPA.gov/Toxics-Release-Inventory-TRI-Program</u>.

For more information about the U.S. EPA's work efforts related to PFAS, please see <u>EPA.gov/PFAS</u>. For more information about EGLE's work efforts related to PFAS, please see <u>Michigan.gov/PFASResponse</u>.

# COMMENT 6:

One commenter asked if WDI was the only landfill in Michigan to accept radioactive waste with concentrations as high as 500 picocurie/gram (pCi/g)?

# **RESPONSE:**

Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) waste is not regulated as a radioactive waste, this includes low-level or low-activity radioactive waste.

WDI is not approved to accept any material that is regulated as a radioactive waste; however, they are approved to accept TENORM waste, with concentrations of the radioactive isotopes: Radium (RA)-226, and RA-228 up to 50 pCi/g; and Lead (Pb)-210 up to 260 pCi/g. Authorization to accept TENORM waste with concentrations up to 500 pCi/g requires a formal request and review process, as described in <u>MCL 324.11132</u>. At this time, WDI has not made the request to accept TENORM up to 500 pCi/g.

Under the Natural Resources and Environmental Protection Act (NREPA), no landfill in the state of Michigan is permitted to accept waste with Ra-226, and Ra-228 concentrations greater than 50 pCi/g, or Pb-210 concentrations greater than 260 pCi/g.

#### COMMENT 7:

One commenter asked why the U.S. EPA, and EGLE were just now requiring WDI to install a leak detection system.

## **RESPONSE:**

WDI has been required to design and construct any new hazardous waste landfill cells with a leak detection system since RCRA was passed in 1984. The PCB Approval also requires WDI to design and construct any new cells for PCB waste with a leak detection system since 1997, when WDI's first PCB Approval was issued.

# COMMENT 8:

One commenter asked how often the U.S. EPA, or EGLE independently test the groundwater.

# **RESPONSE:**

At a minimum, EGLE independently samples the groundwater at least once a year during an annual inspection; however, additional sampling events are relatively common if deemed necessary or useful by EGLE. In addition to independently sampling groundwater, EGLE also independently samples leachate, leak detection, soil, sediment, and surface water.

#### COMMENT 9:

One commenter asked if there were any groundwater sampling results that indicated a release to the groundwater, or were they all non-detect.

# **RESPONSE:**

There is no evidence from groundwater sampling to indicate a release to the groundwater.

# COMMENT 10:

Multiple commenters asked if WDI is required to sample for PFAS in the leachate and groundwater.

#### **RESPONSE:**

At this time, WDI is not required to sample for PFAS in the leachate, or groundwater, pursuant to their License or PCB Approval. During the review of WDI's renewal application, EGLE will reevaluate the leachate and groundwater monitoring programs.

#### COMMENT 11:

One commenter asked if the leachate is analyzed for radioactivity.

#### **RESPONSE:**

The leachate from each subcell in MC-VI is sampled and analyzed annually for radioactive isotopes. Since MC-VI is the only location that contains TENORM waste, it is the only cell sampled for radioactive isotopes in the leachate.

#### COMMENT 12:

One commenter asked if the leachate ponds are analyzed for radioactivity.

#### **RESPONSE:**

WDI does not have any leachate ponds. EGLE and the U.S. EPA assumes the commenter is referring to the sedimentation basins located east and south of the landfill cells. These ponds are used to hold non-contact stormwater runoff. In this case, the sediment in each of the three sedimentation basins are sampled for radioactive isotopes once each calendar quarter following a rain event.

The leachate is handled as hazardous waste, and piped directly to the on-site wastewater treatment plant. The leachate is not accumulated in ponds.

#### COMMENT 13:

One commenter asked if there was proof that the new liner design will not leak when it is exposed to acidic and corrosive hazardous waste.

#### **RESPONSE:**

WDI demonstrated that the new liner design was compatible with the waste and leachate contained in each cell. WDI's demonstration is available at <u>Michigan.gov/USEcologyWDI</u>.

#### COMMENT 14:

One commenter asked how the new liner design compares to the existing liner design in regard to radioactivity.

#### **RESPONSE:**

WDI demonstrated that the new liner design was compatible with the waste and leachate that are contained in each cell. Based on this demonstration and an understanding of TENORM, EGLE was able to make the determination that the new liner design is as protective, or more protective than the existing approved compacted clay liner system, and will reliably contain the TENORM waste.

## COMMENT 15:

One commenter asked if the U.S. EPA or EGLE had determined what the total radioactivity load in the landfill would be if WDI continued to accept radioactive waste. It was further asked if the new liner design would still be protective with that concentration.

#### **RESPONSE:**

WDI is not approved to accept any material that is regulated as a radioactive waste. WDI's License allows WDI to accept TENORM waste up to the permitted volume of 22.45 million cubic yards, which includes the waste already in place.

WDI demonstrated that the new liner design was compatible with the waste and leachate contained in each cell. Based on this demonstration, and an understanding of TENORM, EGLE determined the new liner design is equivalent to, or more protective than the existing approved compacted clay liner system, and will reliably contain the TENORM waste.

# **RISK ISSUE**

# COMMENT 16:

Multiple commenters expressed concern about why WDI is requesting the modification to the liner.

#### **RESPONSE:**

According to WDI's January 21, 2021, letter, the modification request was made to upgrade the design of MC-VI G4-G7, and MC-VI F1-F4, to incorporate a geosynthetic clay liner into the hazardous waste landfill liner system. Under the Part 111 rules, a licensee (i.e., WDI) may request a license modification by providing the specified technical information. EGLE, and the U.S. EPA, has the responsibility to evaluate the information and determine if it complies with the rules. Both agencies have determined that the new liner design is equivalent to, or more protective than the existing approved compacted clay liner system.

# COMMENT 17:

One commenter asked if the expert engineers that examined the modification were paid by WDI, or EGLE/ U.S. EPA.

# **RESPONSE:**

The U.S. EPA, and EGLE staff reviewed the modification request.

# COMMENT 18:

One commenter asked what type of environmental review has been performed in terms of the potential impacts to the Huron River Watershed, and specifically the Huron River and Belleville Lake. It was also asked for that review to be made public.

#### **RESPONSE:**

EGLE and the U.S. EPA did evaluate the new design to ensure it provided equivalent environmental protections. Specifically, that the design prevents the migration of any hazardous constituents into the groundwater or surface water. The new liner design was determined to be equivalent to or more protective for the environment and human health than the existing approved compacted clay liner system.

WDI conducted an environmental assessment as part of their License renewal application. The environmental assessment will be posted on EGLE's website at <u>Michigan.gov/USEcologyWDI</u>.

#### COMMENT 19:

One commenter asked how often radioactivity testing is performed at McBride Middle School.

#### **RESPONSE:**

Radioactivity or radiation testing is not done at McBride Middle School, because there is no indication of a release or impact to the environment or human health, based on the environmental monitoring and sampling that WDI performs. This monitoring and sampling includes air monitoring and direct radiation monitoring on all of the perimeter fence lines; groundwater monitoring; and surface water and sediment sampling at the sedimentation basins.

#### COMMENT 20:

One commenter mentioned historical research done by the U.S. EPA that demonstrated all landfill liners leak. It was further asked what the U.S. EPA, and EGLE are doing to ensure that the liner system will not fail and contaminate the surrounding environment.

#### **RESPONSE:**

Since the commenter did not specify the referenced research, the U.S. EPA and EGLE cannot comment on any specific research study. However, there are many design controls in place to prevent and detect a leak in the liner. In particular, leachate that collects above the landfill liner is regularly measured, pumped out, and sampled and analyzed. Below this first liner, is a second collection system (known as the leak detection system) and a second landfill liner. Naturally occurring water levels in the leak detection system are monitored regularly, and pumped out. This water is sampled and analyzed on a quarterly basis. If contaminants are detected in the water from the leak detection system, which could indicate a leak in the liner, then immediate action is required to determine the source of the contaminants, and to address any landfill design or operational issues. In addition, more frequent monitoring may be initiated. Finally,

groundwater is sampled and analyzed on a quarterly basis in order to determine if a leak from the landfill is occurring. To date, no contaminants have been detected in the groundwater.