

RESPONSE TO COMMENTS

HAZARDOUS WASTE MANAGEMENT FACILITY POSTCLOSURE OPERATING LICENSE

Waste Management of Michigan, Inc.
Woodland Meadows North Landfill Facility
Canton Township, Michigan
MID 000 810 408

September 28, 2018

SITE DESCRIPTION

The Woodland Meadows North (WMN) site is a 61-acre landfill cell, located at 4620 Hannan Road, Canton Township, Michigan, that accepted nonhazardous wastes and wastes that became regulated as hazardous with the implementation of the state and federal hazardous waste regulations. Waste Management of Michigan, Inc. (Waste Management), decided not to continue the landfill disposal of hazardous waste at this facility and closed the cell in 1983, certified the closure, and has been conducting postclosure maintenance and monitoring of the cell.

Currently, the closed WMN hazardous waste landfill cell is licensed under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The existing postclosure operating license was issued on September 12, 2005, and expired on that date in 2015. Waste Management submitted a timely renewal application on May 18, 2015, which has allowed them to continue post-closure maintenance and monitoring, under that existing license, until a final decision is made on their renewal application. This operating license, once renewed, will expire on September 28, 2028.

OVERVIEW

This Response To Comments for the WMN hazardous waste landfill facility is organized to summarize the substantive comments received by the Department of Environmental Quality (DEQ) regarding the draft Postclosure operating license. The comments were received in response to the public notice that was published in the Canton Eagle on January 18, 2018, and the associated comment period that extended from January 18, 2018, through March 5, 2018.

RESPONSE TO COMMENTS

1. Comment: *Cover Page – Authorized Activities*

Waste Management requests that either the appropriate boxes be checked or only the appropriate management activities be included in this section.

Response: The cover page has been revised to check the appropriate boxes for the authorized activities.

2. Comment: *Cover Page – Applicable Regulations and License*

Waste Management requests that language be added to the last paragraph that recognizes the possibility of voluntary termination of the license based on a demonstration of functional stability, i.e., the site no longer poses a threat to human health and the environment.

Response: The DEQ believes that the language in Part VI of the license addresses the possible modification or termination of postclosure activities based on data generated as a result of the Evaluation of Postclosure Care (EPCC) plan.

3. Comment: *Condition II.I - Recordkeeping and Reporting, Paragraph 2*

Waste Management requests that this paragraph be modified to require submittal of monitoring results within 90 days of sampling, consistent with Section 8.2 of the Sampling and Analysis Plan (SAP) (Attachment 4).

Response: The SAP has been revised to be consistent with Condition II.I.2 for submitting environmental monitoring results within 60 of days of sampling.

4. Comment: *Condition II.N – Documents to be Maintained at the Facility*

Waste Management requests that the Functional Stability EPCC Plan, which is required by Part VI of the license, be added to the list of documents.

Response: Condition II.N has been revised to add the EPCC Plan.

5. Comment: *Condition III. A – Coverage of License, Paragraph 1*

A revised Facility Drawing dated May 15, 2015, was included with the license application. The drawing was revised to remove the Waste Oil Storage area, and the remaining Waste Management Units were re-numbered.

Waste Management sold the Gas Recovery Facility and associated equipment, including the oil/water separator, to Ameresco, Inc. Waste Management continued to operate the Gas Recovery Facility for a period of time after the sale, but now does not own or operate the plant or associated equipment.

Waste Management requests the paragraph be modified to reference the Facility Drawing dated May 15, 2015.

Response: The Facility Drawing reference in Condition III.A.1 has been revised to reflect the drawing dated April 27, 2018, showing the current facility configuration which includes the Waste Oil Storage area (WMU 2) that is located on land owned by Waste Management and is anticipated to go through a clean closure to be implemented by Ameresco, Inc. This drawing is included as part of Attachment 3 of the license.

6. Comment: *Part IV Environmental Monitoring Conditions*

Waste Management requests an introductory paragraph be added, discussing the Functional Stability EPCC Plan. Under the plan, the monitoring data will be used in the evaluation of the threat associated with the landfill, which will ultimately result in recommendations to extend, further optimize, or terminate the postclosure care activities.

Response: The DEQ believes that the language in Part VI of the license adequately addresses the purpose of the EPCC Plan.

7. Comment: *Condition IV.A – Groundwater Monitoring Program, Paragraph 1*

Waste Management requests language to be added that clarifies that the two piezometers are to be used for collecting water levels only.

The third subparagraph is mistakenly labelled (b) but should actually be (c). Waste Management requests this paragraph be modified to be consistent with well purging techniques outlined in the SAP.

In subparagraph (d), the page reference appears to be in error.

Response: The DEQ added a clarifying statement indicating that GA-46W and GA-51 are piezometers for water level collection only. The third paragraph has been relabeled as (c) and has been updated to be consistent with the SAP. The page reference in subparagraph (d) has been corrected to the correct page in Attachment 4.

8. Comment: *Condition IV.A – Groundwater Monitoring Program, Paragraph 2.*

Waste Management requests the date of the approved SAP be included.

Response: The DEQ concurs with this request and has revised that Condition to include the date of the approved SAP.

9. Comment: *Condition IV.A – Groundwater Monitoring Program, Paragraph 3.*

The wells are equipped with dedicated sampling equipment, so equipment blanks are not required. Given the long monitoring history for the site, the SAP (Section 7.2) provides for optional field and/or trip blanks. Waste Management requests modification to the language regarding field and trip blanks, for consistency with the SAP.

Response: The DEQ concurs and has changed Condition IV.A.3(e) to state: “This shall include results of any equipment, field, and trip blanks collected, and discussion and evaluation of the adequacy of the data with respect to the Sampling and Analysis Plan specifications and requirements.”

- 10. Comment:** *Condition IV.A – Groundwater Monitoring Program, Paragraph 4*
Waste Management requests modifications to the language to clarify the reporting limits for laboratory data

Response: The DEQ agrees that further clarification is warranted and Conditions IV.A.4(a) and IV.A.5 have been revised to indicate that the reporting limits are “also listed in Table 2 of Attachment 4” of the license.

NOTE: The original draft of the Postclosure Operating License incorporated Condition IV.A.5 through Condition IV.A.12 from the 2005 Postclosure Operating License, maintained with the intention of providing consistency between license terms. However, due to the array of comments regarding paragraphs 6 through 12, the original paragraphs 5 through 12 were replaced with the Hazardous Waste Program’s Operating License standard boilerplate, which consolidated the section down to Condition IV.A paragraphs 5 through 9.

- 11. Comment:** *Condition IV.A – Groundwater Monitoring Program, (Original Paragraph 6, Now Paragraph 5 per preceding NOTE)*
Waste Management requests that this paragraph be modified to require submittal of monitoring results with 90 days of sampling, and to clarify the reporting limits for laboratory data, consistent with the SAP.

Response: The SAP has been revised to be consistent with Condition II.I.2 for reporting a statistically significant increase (SSI) within 60 of days of sampling. Refer to Comment 10, above, for our response to clarifying the reporting limits for laboratory data, consistent with the SAP.

- 12. Comment:** *Condition IV.A – Groundwater Monitoring Program, (Original Paragraph 7, Now Paragraph 5 and Paragraph 6 per preceding NOTE)*
Waste Management requests modifications to the language to clarify the procedures for determination of an SSI above background and associated verification sampling required to make such determination, consistent with the SAP. We also request use of the “SSI” rather than “increase” or “statistically significant increase” in this and following sections.

Response: The DEQ further clarified the process for the determination of an initial exceedance, verifying the exceedance and determining if the exceedance is statistically significant via the revised text in Paragraph 5 and the verification method in Paragraph 6. The DEQ has changed “statistically significant increase” to “SSI” for consistency throughout the license.

- 13. Comment:** *Condition IV.A – Groundwater Monitoring Program, Paragraph 8*
Waste Management requests modifications to the language to clarify that these requirements apply to an SSI.

Response: Condition IV.A – Groundwater Monitoring Program, Paragraph 8 has been replaced by boilerplate Condition IV.A.7, which states:

“If the licensee determines pursuant to Conditions IV.A.5 and IV.A.6 of this license that an SSI has occurred for primary parameters, the licensee shall address the increase in accordance with R 299.9612 and 40 CFR §264.98(f) and (g) and:...”

- 14. Comment:** *Condition IV.A – Groundwater Monitoring Program, Paragraph 9*
Waste Management requests modifications to the language to clarify that these requirements apply to an SSI.

Response: Condition IV.A – Groundwater Monitoring Program, Paragraph 9 has been replaced with boilerplate Condition IV.A.8, which reads:

“If the licensee determines pursuant to Conditions IV.A.5 and IV.A.6 of this license that an SSI has occurred for any secondary parameter, the licensee shall address the increase in accordance with R 299.9612 and:...”

- 15. Comment:** *Condition IV.A – Groundwater Monitoring Program, (Original Paragraph 11, Now Paragraph 5 and Paragraph 6 per preceding NOTE)*
Waste Management requests that this paragraph be modified to require submittal of monitoring results within 90 days of sampling, and to clarify the procedures for determination of an SSI and associated verification sampling required to make such determination, consistent with the SAP (Attachment 4).

Response: The SAP has been revised to be consistent with Condition II.I.2 for requiring submittal of monitoring results within 60 days of sampling. See Comment 12 above for detection and verification of an SSI.

- 16. Comment:** *Condition IV.A – Groundwater Monitoring Program, (Original Paragraph 12, Now Paragraph 5 and Paragraph 6 per preceding NOTE)*
Waste Management requests modifications to the language to clarify that these requirements apply to an SSI.

In subparagraphs (b) and (c), Waste Management requests modifications to the language to clarify that only the offending parameter(s) are to be resampled.

In subparagraphs (d) and (e), Waste Management requests changing the time requirement from 60 days to 90 days, for consistency with the primary parameter requirements in Conditions IV A.8 and IV A.9 of the license.

Response: Condition IV.A – Groundwater Monitoring Program, Paragraph 12 was replaced with boilerplate Conditions IV.A.5 and IV.A.6. See comment 12 above for further explanation.

- 17. Comment:** *Condition IV.B – Surface Water Monitoring Program, Paragraph 2*
Waste Management requests that this paragraph be modified to require submittal of monitoring results within 90 days of sampling, and that the reference to Table 5 of the SAP be corrected to Table 4.

Response: The SAP has been revised to be consistent with Condition IV.B for requiring submittal of monitoring results within 60 of days of sampling. Table 5 has been changed to Table 4.

- 18. Comment:** *Condition IV.B – Surface Water Monitoring Program, Paragraph 3*
Waste Management requests that the language regarding a significant increase in a surface water quality parameter be modified to allow for resampling in lieu of collecting and storing duplicate samples, to eliminate the potential issue of missed hold times.

Response: Condition IV.B – Surface Water Monitoring Program, Paragraph 3 has been revised to read:

“If a significant increase is detected in a monitoring parameter(s), the licensee shall resample both upstream and downstream locations for each parameter listed in Table 4 of Attachment 4, of this license for confirmation purposes.”

This will remove potential holding time issues.

- 19. Comment:** *Condition IV.B – Surface Water Monitoring Program, Paragraph 4*
Consistent with our previous comment, Waste Management requests that the language be modified to clarify that a significant increase will be confirmed through resampling.

Response: Condition IV.B – Surface Water Monitoring Program, Paragraph 4 does not need modification to remain consistent.

- 20. Comment:** *Condition IV.B – Surface Water Monitoring Program, Paragraph 5*
Waste Management requests modifications to the language to clarify that these requirements apply to a confirmed significant increase.

Response: Condition IV.B – Surface Water Monitoring Program, Paragraph 5 has been revised to read:

“Within 30 days after the confirmation of a significant increase, the licensee shall determine whether a discharge to surface waters is occurring, determine the source, and take immediate steps to eliminate and prevent any such discharge.”

- 21. Comment:** *Condition IV.C – Leachate Monitoring Program, Paragraph 3*
Waste Management requests modifications to the language to clarify that the presence of an organic parameter in the leachate must be confirmed, and that a sporadic detection would not trigger changes to the groundwater and surface water monitoring programs.

Response: Condition IV.C – Leachate Monitoring Program, Paragraph 3 has been revised to read:

Any organic parameter that is added to the monitored parameters due to its elevated presence in the routine leachate monitoring, conducted as specified in Attachment 4 of this license, shall be added to the groundwater and surface water monitoring parameters by the licensee. Should a new parameter be detected in the leachate, the licensee shall have the option of sampling the leachate within 60 days to confirm the new parameter, prior to adding in the new parameter to the groundwater and surface water monitoring programs. If an added parameter is not detected over two consecutive samplings in the groundwater and surface water monitoring programs, it may be removed from those programs, if approved in writing by the Division Director.

- 22. Comment:** *Condition IV.C – Leachate Monitoring Program, Paragraph 4*
Waste Management requests additional language to clarify that evaluation of the leachate data will be part of the EPCC Plan, required by Part VI of the License.

Response: DEQ does not feel it is necessary to incorporate the reference to the EPCC into Condition IV.C – Leachate Monitoring Program, Paragraph 4. The EPCC Plan identifies the purpose of the data that will be evaluated as part of the EPCC.

- 23. Comment:** *Condition V.C – Identification of Existing Waste Management Units*
Waste Management no longer owns or operates the Gas Recovery Facility and associated equipment, including the oil/water separator. We request that this section be modified to remove the Waste Oil Storage Area, and re-number the remaining Waste Management Units accordingly.

Response: Waste Management remains the owner of the land that is leased to Ameresco, Inc. for the Gas Recovery Facility; therefore, is still responsible for the Waste Oil Storage Area Waste Management Unit. No revision to this condition is necessary.

SUMMARY OF CHANGES TO THE LICENSE

1. **Cover Page:** Authorized Activities

Change: The Postclosure and Landfill boxes were checked as the authorized activities on the cover page of the license.

2. **Condition:** Condition II.N

Change: This condition was revised to add the EPCC Plan to the list of DOCUMENTS TO BE MAINTAINED AT THE FACILITY.

3. **Condition:** Condition III.A.1

Change: This condition was revised to reference the drawing dated April 27, 2018.

4. **Condition:** Condition IV.A.1

Change: This condition now reads:

1. The licensee shall conduct a detection monitoring program. Under this program, the licensee shall operate and maintain a groundwater monitoring system consisting of monitoring wells labeled: MW-6R, E7A, MW-12R, MW-14, MW-15, GA-31B, GA-32C, GA-33C, GA-34A, GA-35A, GA-36A, GA-46W, MW-50, and GA-51, as shown on Figure 2 of the Groundwater Monitoring Sampling and Analysis Plan, Attachment 4 of this license. GA-46W and GA-51 are designated to serve as piezometers for water level collection only. {R 299.9611(2)(a) and (b), R 299.9612, and R 299.9629 and 40 CFR Part 264, Subpart F, excluding 40 CFR §§264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101}

5. **Condition:** Condition IV.A.1(c)

Change: This condition now reads:

- (c) To ensure a representative sample, the well will be evacuated as specified in Section 6, on Page 9 of Attachment 4 of this license. Wells shall be sampled immediately after purging where recovery rates allow. Where wells are pumped dry during purging, recovery rates shall be determined, and samples taken, as soon as sufficient recovery occurs, not to exceed 24 hours. {R 299.9612 and 40 CFR § 264.97(d) and (e)}

6. Condition: Condition IV.A.1(d)

Change: This condition now reads:

- (d) Water removed from each monitoring well shall be managed as specified in Section 6.1.3, of Attachment 4, of this license. {R 299.9521(3)(b)}

7. Condition: Condition IV.A.2

Change: This condition now reads:

- 2. The licensee shall collect and analyze samples according to the schedule, parameters, and procedures specified in the Groundwater Monitoring Sampling and Analysis Plan, approved on September 28, 2018, Attachment 4 of this license. The licensee shall submit proposed revisions to the Groundwater Monitoring Sampling and Analysis Plan to the Division Director for approval, prior to implementation and shall revise any other affected document accordingly. If approved, the revisions shall become part of this operating license. {R 299.9519(5)(c)(ii), R 299.9611(2)(a), R 299.9612, and 40 CFR § 264.97(d) and (e)}

8. Condition: Condition IV.A.3(e)

Change: This condition now reads:

- (d) An analysis and discussion of laboratory and field related QA/QC information. This shall include results of any equipment, field, and trip blanks collected, and discussion and evaluation of the adequacy of the data with respect to the Sampling and Analysis Plan specifications and requirements.

9. Condition: Condition IV.A.4(a)

Change: This condition now reads:

- (a) Background values for the non-naturally occurring primary groundwater monitoring parameters, listed in Table 2, of Attachment 4, of this license, shall be the laboratory detection limit(s) for the parameter(s) which are also listed in Table 2, of Attachment 4, of this license.

10. Condition: Condition IV.A.5

Change: This condition now reads:

5. *Detection Monitoring Program.* Within 60 days of the conclusion of each sampling event, the licensee shall determine, utilizing Section 7.3, of Attachment 4, of this license, if an initial exceedance has occurred compared to background levels for each primary and secondary parameter listed in Table 2, of Attachment 4, of this license. For the non-naturally occurring primary parameters, any occurrence above the laboratory reporting limit(s) for the parameter(s) shall be considered an initial exceedance. The licensee shall notify the Division within one working day following the determination of an initial exceedance and arrange for a resampling of the offending well within 30 days. The initial exceedance will be evaluated with a pass 1 of 1 resampling approach to determine if an SSI has occurred. {R 299.9612(1)(c) and (e) and 40 CFR §264.97(h) and (i)}

11. Condition: Condition IV.A.6

Change: This condition now reads:

6. If an SSI is confirmed, in accordance with Condition IV.A.5, for any primary or secondary parameter, the licensee shall notify the Division, Hazardous Waste Section, Permit and Corrective Action Unit, by telephone, within one working day and arrange a resampling as soon as possible to reconfirm the SSI. Resampling must include not less than four replicate samples at the affected well(s) for the offending parameter(s). An SSI shall be reconfirmed if two of the four replicates are detected above the laboratory reporting limit(s) for primary parameter(s), or two of the four replicates for secondary parameters exceeds the calculated background concentration for the offending parameter. {R 299.9612 and 40 CFR §264.97(g)}

12. Condition: Condition IV.A.7

Change: This condition now reads:

7. If the licensee determines, pursuant to Conditions IV.A.5 and IV.A.6 of this license, that an SSI has occurred for primary parameters, the licensee shall address the increase in accordance with R 299.9612 and 40 CFR §264.98(f) and (g) and:
 - (a) Notify the Division Director, or if unavailable, the MDEQ PEAS at 1-800-292-4706.

- (b) Immediately take steps to determine the cause of the contamination and eliminate the source of discharge.
- (c) As soon as possible, sample the offending well and the wells immediately adjacent to the offending well that are in the monitoring program listed in Condition IV.A.1 for the parameters listed in Table 3 of Attachment 4.
- (d) 180 days after the determination, submit to the Division Director a detailed description of corrective actions that shall achieve compliance with applicable laws and rules, including a schedule of implementation. Corrective action shall also meet the requirements of R 299.9629 and include a plan for a groundwater monitoring program that shall demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of 40 CFR §264.99.
- (e) Prior to a license modification requiring a compliance monitoring and corrective action program, the licensee shall provide the Division Director, or his or her designee, with weekly telephone updates and written reports every two weeks regarding the progress to date in determining the cause of contamination and eliminating the discharge. The written report shall include the results of all samples from environmental monitoring conducted by the licensee. {R 299.9521(3)(b)}
- (f) The licensee may demonstrate that a source other than the licensed facility, or an error in sampling, analysis, or evaluation solely caused the increase. A report that contains this information shall be submitted within 60 days of a statistically significant determination under Condition IV.A.6 of this license.

13. Condition: Condition IV.A.8

Change: This condition now reads:

- 8. If the licensee determines, pursuant to Conditions IV.A.5 and IV.A.6 of this license, that an SSI has occurred for any secondary parameter, the licensee shall address the increase in accordance with R 299.9612 and:
 - (a) Notify the Division Director, or if unavailable, the MDEQ PEAS at 1-800-292-4706.

- (b) As soon as possible, sample the offending well and the wells immediately adjacent to the offending well that are in the monitoring program listed in Condition IV.A.1 for the parameters listed in Table 3 of Attachment 4.
- (c) The licensee shall immediately take steps to determine the cause of contamination and eliminate the source of the discharge. A report that explains the chronology of events, investigative methods, all laboratory analyses, calculations, field activities, and findings related to this determination shall be submitted within 60 days of a statistically significant determination under Condition IV.A.6 of this license.
- (d) 180 days after the determination, submit to the Division Director a detailed description of corrective actions that shall achieve compliance with applicable laws and rules, including a schedule of implementation. Corrective action shall also meet the requirements of R 299.9629 and include a plan for a groundwater monitoring program that shall demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of 40 CFR §264.99.
- (e) The licensee may demonstrate that a source other than the licensed facility, or an error in sampling, analysis, or evaluation solely caused the increase. A report that contains the information in Condition IV.A.8(c) of this license shall be submitted within 60 days of a statistically significant determination under Condition IV.A.6 of this license.

14. Condition: Condition IV.A.9

Change: This condition now reads:

- 9. In the event that the Division Director determines from the findings of Conditions VI.A.5 and VI.A.6, of this license, that an SSI in hazardous constituents has occurred in the groundwater and the Director finds, in accordance with §11148 of Act 451, that the increase may present an imminent and substantial hazard to the health of persons or to the natural resources, or is endangering or causing damage to public health or the environment, the licensee shall immediately comply with an order issued by the Director pursuant to §11148(1) of Act 451 to conduct activities, as required by the Director, to eliminate the said endangerment.
{R 299.9612(1)(g)}

15. Condition: Condition IV.A.10

Change: This condition was condensed with Condition IV.A.9

16. Condition: Condition IV.A.11

Change: This condition is now condensed into Conditions IV.A.5 and IV.A.6

17. Condition: Condition IV.A.12.d

Change: This condition now reads:

Condition IV.A.8(c) The licensee shall immediately take steps to determine the cause of contamination and eliminate the source of the discharge. A report that explains the chronology of events, investigative methods, all laboratory analyses, calculations, field activities, and findings related to this determination shall be submitted within 60 days of a statistically significant determination under Condition IV.A.6 of this license.

18. Condition: Condition IV.A.12.e

Change: This condition now reads:

Condition IV.A.7(f) The licensee may demonstrate that a source other than the licensed facility, or an error in sampling, analysis, or evaluation solely caused the increase. A report that contains this information shall be submitted within 60 days of a statistically significant determination under Condition IV.A.6 of this license.

19. Condition: Condition IV.B.3

Change: This condition now reads:

3. If a significant increase is detected in a monitoring parameter(s), the licensee shall resample both upstream and downstream locations for each parameter, listed in Table 4, of Attachment 4, of this license for confirmation purposes.

20. Condition: Condition IV.B.5

Change: This condition now reads:

5. Within 30 days after the confirmation of a significant increase, the licensee shall determine whether a discharge to surface waters is occurring,

determine the source, and take immediate steps to eliminate and prevent any such discharge.

21. Condition: Condition IV.C.3

Change: This condition now reads:

3. Any organic parameter that is added to the monitored parameters due to its elevated presence in the routine leachate monitoring, conducted as specified in Attachment 4 of this license, shall be added to the ground water and surface water monitoring parameters by the licensee. Should a new parameter be detected in the leachate, the licensee shall have the option of sampling the leachate within 60 days to confirm the new parameter, prior to adding in the new parameter to the groundwater and surface water monitoring programs. If an added parameter is not detected over two consecutive samplings in the groundwater and surface water monitoring programs, it may be removed from those programs, if approved in writing by the Division Director.