

April 15, 2025

Michael W. Smith, P.E.  
Environmental Engineer Senior  
IDNR – Land Quality Bureau  
6200 Park Avenue, Suite 200  
Des Moines, Iowa 50321



**RE: SEMI-ANNUAL INSPECTION – SPRING 2025  
FLOYD-MITCHELL-CHICKASAW COUNTIES SANITARY LANDFILL  
IDNR PERMIT #66-SDP-01-73P  
ORIGINAL LANDFILL AREA - CLOSED  
HORIZONTAL EXPANSION AREA - ACTIVE**

Dear Mr. Smith:

In accordance with Special Provision XI.5 of the SDP Permit, a semi-annual inspection of the Floyd-Mitchell-Chickasaw Counties SLF was conducted the afternoon of April 10, 2025. The results of the inspection were discussed with Christian Fox, Director, following the inspection. Conditions at the time of the inspection were overcast with slight winds and temperatures in the low 50's.

#### **Status of the Permit**

The SDP Permit was renewed on December 10, 2021. The facility has received the following revisions to the Permit to date:

- Revised Permit, Amendment No. 1, May 25, 2023, removed the words “soil conditioner” from the permit to conform with the Iowa Administrative Code.
- Revised Permit, Amendment No. 2, July 6, 2023, approved the request to discontinue ambient air monitoring at the “A” points.

#### **Annual Water Quality Report**

The 2024 Annual Water Quality Report (AWQR) for the active and closed areas was submitted to IDNR on January 28, 2025 (Doc #112031). IDNR comments have not been received to date.

#### **Financial Assurance**

IDNR granted the Floyd Mitchell Chickasaw Solid Waste Management Agency an extension to the deadline for the submission of 2025 Financial Assurance documentation to April 30, 2025 (Doc #112617). The 2025 Financial Assurance documentation was submitted to IDNR on April 14, 2025 (Doc #112827).

#### **Permit General Provisions**

1. Quarterly tonnage reports are submitted as required.

2. Asbestos wastes, petroleum contaminated soils and grit and bar screenings are accepted in accordance with the landfill's SWAC. Note that Special Provision X.14 of the SDP Permit authorizes the direct disposal of petroleum contaminated soil at the landfill working face.
3. Special Waste Authorizations are obtained as necessary.

### **Special Provisions (Phase 1,2 & 3 – Active Landfilling Area)**

1. The landfill is accepting waste for disposal in accordance with the Floyd-Mitchell-Chickasaw County Comprehensive Plan. The latest update of the Comprehensive Plan was approved by IDNR on October 8, 2020.
2. The landfill is being operated in general accordance with the information in the 2021 Municipal Solid Waste Permit Renewal dated May 10, 2021 (Doc #100449). Phases 1, 2, and 3 are the active disposal areas.
3. Leachate is stored in a Subtitle D composite lined lagoon. Leachate is recirculated within Phases 1, 2, and 3 in accordance with the SDP Permit or is hauled to a POTW for treatment and disposal in accordance with an applicable leachate treatment agreement. The landfill currently has leachate treatment agreements with Osage and Mason City. Mr. Fox reported that the majority of leachate is hauled to Mason City as the leachate treatment agreement with Mason City allows for a higher daily disposal volume. The leachate storage lagoon has a storage capacity of approximately one million gallons and at the time of the inspection had approximately 8'-10' of storage available to the top of the lagoon.

The Pit Boss leachate evaporator was removed from the leachate lagoon for the winter and will be installed later this spring when the weather stabilizes. Mr. Fox reported that staff has been pleased with the operation of the evaporator. Two of the three diffusers were operating in the leachate lagoon during the inspection, one of the diffusers has been cleaned and is ready to install.

Leachate piezometers in Phases 1, 2, and 3 are measured monthly when leachate is not being recirculated. When leachate recirculation is ongoing levels are measured daily in accordance with the Leachate Recirculation Operation Plan (Doc #85606). A Leachate Control System Performance Evaluation Report will be included in the AWQR.

4. The sampling points for Phases 1, 2, and 3 include:
  - Background: MW-4, MW-5, MW-9, and MW-14
  - Downgradient: MW-11, MW-12, MW-15, and MW-16

All monitoring wells viewed during the inspection were locked.

5. Leachate recirculation is by either surface application (primary method of recirculation) or by a 4" pipe buried in the solid waste in Phase 1. All recirculation is performed in

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general accordance with the SDP Permit. The annual pressure testing of the leachate recirculation force main for 2025 required by this Special Provision has not been completed to date.

6. Quarterly gas monitoring is conducted by either landfill staff or HLW personnel. Gas monitoring results will be included in the AWQR.
7. Yard waste is not typically received at the site.
8. Topcoat or Concover are approved in the SDP Permit for use as alternative daily cover (ADC).
9. Tires are accepted, stored, and recycled in general accordance with the permit. The tires are stored in a building – the tire storage area was reviewed and was neat and orderly.
10. White goods are accepted, stored, and recycled in general accordance with the permit. The white goods are stored in a building. When numbers warrant the white goods are picked up by a recycler to be demanufactured. The white goods storage area was reviewed – the storage area was neat and orderly with all appliances being stored upright.

The small quantities of scrap metal collected are temporarily stored outside and recycled through a local scrap dealer.

11. Lead acid batteries are accepted, stored, and recycled in general accordance with the permit. Batteries are stored in the HHM building.
12. Pallets received on site are currently landfilled.
13. Farm pesticide containers are accepted, stored, and recycled in general accordance with the permit. There were a small number of containers in the storage area - Mr. Fox reported that accumulated containers were recently removed by the recycler.
14. Petroleum contaminated soil is accepted and directly buried in accordance with the permit.
15. An updated ERRAP was included in Appendix 2 of Section E of the 2021 Municipal Solid Waste Permit Renewal.
16. The landfill will be closed in general accordance with the Closure and Post Closure Plan (CPCP) included in Section I of the 2021 Municipal Solid Waste Permit Renewal.

#### **Special Provisions (Closed Landfill – Original Landfilling Area)**

1. The thirty-year post closure period began on December 29, 2008.

2. The Original Landfilling Area will be maintained in general accordance with the Closure and Post Closure Plan (CPCP) included in Section I of the 2021 Municipal Solid Waste Permit Renewal.
3. There will be no waste disposal, recycling, composting or other related landfill activities on the closed site.
4. The sampling points for the Original Landfilling Area include:
  - Background: MW-4, MW-5, MW-9, and MW-14
  - Downgradient: MW-2, MW-3, MW-6, and MW-7

All monitoring wells viewed during the inspection were locked.

5. Formal inspections of the Original Landfilling Area are completed semi-annually, with a report submitted to IDNR that includes a summary of site conditions and recommendations for corrective actions. Landfill staff also review conditions in the Original Landfilling Area as needed.
6. The diversion and drainage systems are being maintained and are in good shape.
7. The vegetation on the cap is generally in good condition and was mowed in 2024. Specific areas of the cap were seeded in 2024 including mid slope on the northwest corner and in the middle of the cap near the 4x4 GPS post. Seeded areas did see an improvement of vegetation in 2024. The vegetation was dormant during observation on April 10, 2025. No trees were noted on the cap during the inspection.
8. The erosion rills noted during the Spring, 2024 inspection below the lowest terrace on the south side of the site midway between MW-5 and MW-6 were repaired in 2024, but are again active in April, 2025. Mr. Fox reported that the rills will be repaired again in 2025.

Some settlement was previously noted on the western portion of the top of cap. No vegetation changes or ponding were noted in this area, it appears that the settlement has not impacted surface water drainage to date.

The final cover over the majority of the Original Landfilling Area is in excellent condition.

9. Quarterly gas monitoring is conducted by either landfill staff or HLW personnel. Gas monitoring includes the four passive gas vents in the Original Landfilling Area. Gas monitoring results will be included in the AWQR.
10. Based on a risk assessment, the Original Landfilling Area does not require a leachate control plan.
11. The permit holder is conditionally exempt from providing a leachate collection system for the Original Landfilling Area. However, a retrofit leachate collection system was

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installed in 2004 to control an intermittent leachate seep located at the east end of the landfill.

12. An updated ERRAP was included in Appendix 2 of Section E of the 2021 Municipal Solid Waste Permit Renewal.

Based on observations during the inspection, along with discussions with Landfill personnel, it appears that the facility is operating in general conformance with the permit.

### **Stormwater Pollution Prevention Plan**

Annual sampling of stormwater is required in accordance with the NPDES General Permit No. 1 for the FMC SLF (expires 3/10/28). The annual stormwater sample for 2025 required by the General Permit has not yet been collected in 2025. The Stormwater Pollution Prevention Plan (SWPPP) and related figures were updated in 2019.

Vegetation on the intermediate cover in Phases 1, 2, and 3 appeared to be in good condition much improved over the conditions noted during past inspections. A few bare areas were noted on the intermediate cover. Mr. Fox reported that the vegetation on the intermediate cover was broomed to distribute seeds in the Spring of 2024 and is again planned for 2025.

A wet soil area was observed on the east-facing slope of Phase 1. This area is generally located above MW-11. The wet soil area did not exhibit any flow away from the area, but there was evidence of wildlife activity in the area.

Staff removed accumulated sediment from the ditch that drains southern areas of Phases 1, 2, and 3 to eliminate stagnant water in this ditch. Mr. Fox reported that additional vegetation will be removed from the ditch as time allows.

IDNR Field Office #2 conducted an NPDES General Permit #1 Storm Water inspection on October 18, 2023. The report noted that the landfill was “in substantial compliance with National Pollution Discharge Elimination System General Permit #1 at the time of the inspection.”

### **Spill Prevention, Control, and Countermeasures Plan**

Due to the amount of petroleum products stored on site, the FMC SLF operates under a Spill Prevention, Control, and Countermeasures Plan (SPCC). It appears that all petroleum products are being stored as designated in the SPCC. Oil dry is available on site.

The exterior of the tanks and secondary containment systems will be observed during the Fall, 2025 semi-annual inspection to meet the requirements of the SPCC. Forms documenting the visual inspections will be completed and provided to the landfill staff at that time.

### **Additional Comments**

At the time of the inspection the waste disposal area was located in the southern to middle portion of Phase 3. The landfill compactor was in use during the inspection. Daily and

intermediate cover appeared adequate. No surface water ponding was noted in the active area during the inspection.

Litter fences are present on the north, south, and west perimeter of Phase 3. Portable litter fences are also utilized where appropriate. Portable litter fences were in place in the active area during the inspection. There was some litter noted away from the working face - the majority of the litter was being contained by the litter fences or in the on-site vegetation in Phase 1 and Phase 2. No litter was noted off site during the inspection. The Office Manager maintains the litter log. Mr. Fox indicated that the litter in Phase 1 and Phase 2 vegetation will be collected in the near future.

Staff has segregated timbers received from a bridge demolition in the active area. There are used as a base for haul roads in the active area and appear to have worked well to date.

Documentation of load inspections is maintained by the Office Manager on the scale house computer.

Construction of the new customer drop off area was completed in 2023 and the approach to the area was paved in 2024. This area is improving conditions at the site by reducing traffic and congestion at the working face. Mr. Fox reported that both customers and landfill staff are pleased with the addition of the drop off area.

IDNR FO #2 inspected the landfill on August 20, 2024. The report transmittal letter noted that “No violations or deficiencies were documented at the time of the inspection.”

Leachate lines were cleaned November 6, 2023. As per the 3 year cleaning frequency required by IDNR the lines should be cleaned again in 2026.

Staff reviews the Emergency Response and Remedial Action Plan, the Storm Water Pollution Prevention Plan, and the Development and Operations Plan on an annual basis. Records of the staff reviews are maintained on site.

All access roads on site were in good condition, well graded and free of depressions and ruts.

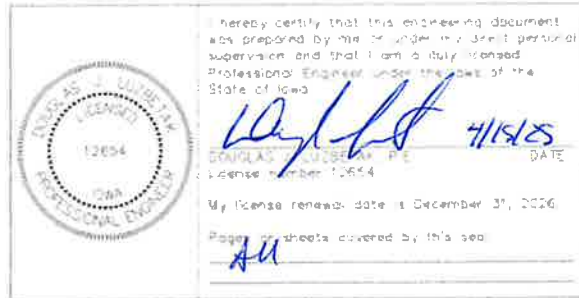
Staff planted additional trees on the north perimeter of the site in 2024 to act as a visual buffer.

The HHM RCC license expires on November 1, 2028.

### **Recommendations**

1. Repair the rill on the south facing slope of the Original Landfill.
2. Monitor the wet area on the east facing slope of Phase 1.
3. Continue to remove/mow tree saplings from landfill cap.
4. Continue to retrieve windblown litter as needed.

5. Continue to monitor vegetation and bare areas on the landfill cap in the Original Landfilling Area and on the intermediate cover in the Active Area and repair any deficiencies as necessary.



cc: Christian Fox, Director FMC Landfill (electronic copy)