



March 3, 2022

MARCIA BEELER
SOUTH CENTRAL IOWA LANDFILL AGENCY
2496 STATE HIGHWAY 92
WINTERSET IA 50273-8185

RE: South Central Iowa Sanitary Landfill
Permit No. 61-SDP-01-78P
Permit Revision #1

Dear Ms. Beeler:

Enclosed is a revised permit for the South Central Iowa Sanitary Landfill.

The previous permit has been modified to incorporate DNR approval of the expansion Conceptual Development Area (special provision #2b). Please note that this permit does not approve construction of any components of that expansion.

The permit and the approved plans must be kept at the sanitary disposal project in accordance with subparagraph 113.11(1)"a". Please review the permit with your operators, as they must become familiar with it.

If you have any questions, please contact me at (515) 689-6548 or mick.leat@dnr.iowa.gov.

Sincerely,

Michael B. "Mick"
Leat

Digitally signed by Michael B.
"Mick" Leat
Date: 2022.03.02 13:39:40 -06'00'

Michael B. "Mick" Leat
Land Quality Bureau

attachment

copy: Doug Luzbetak, P.E.
HLW Engineering Group
204 West Broad Street
P.O. Box 314
Story City, IA 50248

Field Office #5

**IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT PERMIT**

- I. Permit Number:** 61-SDP-01-78
South Central Iowa Sanitary Landfill
- II. Permitted Agency:** South Central Iowa Landfill Agency
- III. Project Location:** The landfill consists of approximately 318 acres located within Sections 33 and 34, Township 76 North, Range 27 West, In Madison County, Iowa. (Street address: 2496 State Highway 92, Winterset, IA 50273)
- IV. Responsible Official**
Name: Diane Fitch, Chair
Address: South Central Iowa Sanitary Landfill
2496 State Highway 92
Winterset, IA 50273
Phone: (515) 462-3083
FAX: (515) 462-3064
- V. Licensed Design Engineer**
Name: Doug Luzbetak, P.E.
Address: HLW Engineering Group
204 West Broad Street, PO Box 314
Story City, IA 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

Iowa License Number: #12654
- VI. Date Permit Issued:** **July 12, 2021**
Date 1st Permit Revision: **March 3, 2022**
- VI. Permit Expiration Date:** **July 12, 2026**

VIII. Issued by: Michael B. "Mick" Leat
Digitally signed by Michael B. "Mick" Leat
Date: 2022.03.02 13:38:10 -06'00'
Iowa Department of Natural Resources

IX. General Provisions

The above named permitted agency is hereby authorized to operate a sanitary disposal project at the described location in conformance with Iowa Code section 455B, the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any provisions contained in Section X of this permit.

The issuance of this permit in no way relieves the applicant of the responsibility for complying with all other local, state, and federal statutes, ordinances, and rules or other requirements applicable to the establishment and operation of this sanitary disposal project.

No legal or financial responsibility arising from the construction or operation of the approved project shall attach to the State of Iowa or the Department of Natural Resources (DNR) due to the issuance of this permit.

If title to this project is transferred, the new owner must apply to the DNR for a transfer of this permit within thirty days of the date of title transfer pursuant to subrule 113.4(3). This permit is void sixty days after the date of title transfer unless the DNR has transferred the permit.

The permit holder shall file a Quarterly Solid Waste Fee Schedule and Retained Fee Report utilizing the DNR's Form 542-3276 and remit tonnage fee payment, as applicable, for all wastes disposed at the sanitary disposal project in accordance with Iowa Code section 455B.310. The Reports will be due January 1, April 1, July 1 and October 1 for the quarters ending September 30, December 31, March 31 and June 30, respectively. The permit holder shall mail the completed report to the Solid Waste Section, Wallace State Office Building, 502 East Ninth Street, Des Moines, Iowa 50319. This reporting procedure supersedes any previous conflicting permit provisions.

The permit holder shall weigh all solid waste collection vehicles and solid waste transport vehicles on a scale certified by the Iowa Department of Agriculture and Land Stewardship. If conditions are such that make it impractical to provide an on-site scale, then off-site scale facilities may be used if justified and approved by the DNR. The permit holder shall comply with the waste weighing, record keeping and tonnage fee reporting requirements defined in rule 101.14(455B,455D). The scale weighing facilities shall comply with the certification and licensing requirements of the Iowa Department of Agriculture and Land Stewardship at all times. The permit holder shall maintain a current copy of the weighing scale facility licensing certificate issued by the Iowa Department of Agriculture and Land Stewardship at all times.

The permit holder shall comply with the gas control provisions of IAC 567 Chapters 20 through 31, including paragraph 23.1(2)"rrr" for the New Source Performance Standards and paragraph 23.1(5)"a" for the Emission Guidelines.

The permit holder shall ensure that the sanitary disposal project does not (1) cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402 of the Clean Water Act, and (2) cause the discharge of a nonpoint source of pollution into waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act.

The permit holder shall submit an updated Municipal Solid Waste Sanitary Landfill Financial Assurance Report Form no later than April 1st, annually, pursuant to rule 113.14(455B). Use of this form provides permit holders a uniform means of submitting all required documentation to ensure that closure and postclosure cost estimates and applicable financial assurance instruments are updated as required.

Failure to comply with Iowa Code section 455B, or any rule of order promulgated pursuant thereto, or any provisions of this permit may result in 1) a civil penalty of up to \$5000 for each day of violation, pursuant to Iowa Code section 455B.307, or 2) the suspension or revocation of this permit, pursuant to Iowa Code section 455B.305.

X. Special Provisions

1. The permit holder is authorized to accept solid waste for disposal in accordance with the approved South Central Iowa Landfill Agency Comprehensive Plan. The Comprehensive Plan as approved by the Department on September 8, 2015; any approved amendments to the plan; and the latest plan update, are hereby incorporated as permit plan documents.

The permitted service area includes: All cities and unincorporated areas of Madison County, excluding Macksburg; all cities and unincorporated areas of Warren County, excluding Carlisle, Hartford, and Norwalk; the Dallas County cities of Dallas Center, De Soto, Dexter, and Van Meter; and the City of Osceola in Clarke County.

In accordance with subrule 101.13(2), the permit holder shall submit an updated Comprehensive Solid Waste Management Plan compliant with the DNR's schedule.

2. The permit holder shall develop and operate the site in accordance with the Development and Operations Plan contained in Section E of the 2021 Permit Renewal documentation (doc #99511), dated January 14, 2021, as submitted by HLW Engineering Group, and the following:
 - a. Waste disposal is limited to Cells 1 through 5. The site vertical height shall not exceed a maximum waste elevation of 1150 feet within these cells. Any further expansion beyond these cells shall require prior DNR approval.
 - b. The following documentation for the new MSWLF Unit described as the Conceptual Development Area was approved on March 3, 2022 and is incorporated into the permit:
 - 1) Site Exploration and Characterization Report, as contained in Section C of the 2021 permit renewal documentation (doc#99511), the local siting/special use permit letter dated February 9, 2021 (doc#99726), the May 24, 2021 response letter #1 (doc#100501), and the December 16, 2021 response letter #2 (doc#101889), all submitted by HLW Engineering Group;
 - 2) Design Plans and Specifications, as contained in Section D of the 2021 permit renewal documentation (doc#99511) and the December 16, 2021 response letter #2 (doc#101889), both submitted by HLW Engineering Group;

- 3) Environmental Monitoring Plans, as contained in the May 24, 2021 response letter #1 (doc#100501) submitted by HLW Engineering Group; and
- 4) Closure and Postclosure Plan, as contained in Section I of the 2021 permit renewal documentation (doc#99511) and the December 16, 2021 response letter #2 (doc#101889), both submitted by HLW Engineering Group.

The permit holder is not currently authorized to construct any cells within this unit.

- c. The first lift of municipal solid waste placed in a newly constructed unit or portion of a unit must be placed in accordance with paragraph 113.8(2)"b" in such a manner to minimize damage to the leachate collection system and liner.
- d. On a biennial basis, provide documentation that site survey monuments have been inspected and maintained in accordance with 567 IAC 113.8(2)"a".
- e. The permit holder shall collect leachate from the leachate control system and properly dispose of the leachate either by treatment in an on-site facility, discharge with an NPDES permit; or by discharge to the Des Moines Metropolitan Wastewater Reclamation Authority in Des Moines. If the discharge is to a POTW with a pretreatment program approved by the DNR, the discharge must comply with the terms and conditions of a local permit issued for the discharge by the POTW. If the discharge is to a POTW without an approved pretreatment program a completed treatment agreement form shall be submitted to the DNR's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the DNR's Solid Waste Section and the local Field office. The treatment agreement must be on DNR Form 31 (542-3221) and must comply with the requirements of subrule 64.3(5).

In addition, the permit holder shall monthly measure leachate head levels and elevations at all piezometers and record the volume of leachate collected and transported to the treatment works. Records of leachate contaminants testing required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.

The permit holder shall annually submit a Leachate Control System Performance Evaluation (LCSPE) Report pursuant to subparagraph 113.7(5)"b"(14) as a supplement to the facility Annual Water Quality Report, as defined in subrule 113.10(10).

- f. The following must be recorded by the permit holder and reported in the LCSPER for each leachate thickness measurement that equals or exceeds 12 inches at LPZ-101:
 - 1) Collection and recording of a verification measurement within 12 hours of the original measurement identifying the exceedance.
 - 2) If 12 inch or greater leachate column is verified in item 1), identify the cause of the noncompliant reading and record specific remedial actions taken by the certified operator to lower leachate thickness at LPZ-101.
 - 3) Measure and record leachate head at LPZ-101 at a minimum frequency of three times per week.

- 4) If a compliant leachate head measurement is not collected at LPZ-101 with 14 days of the original noncompliant measurement, notify the DNR, and review/revise remedial actions taken by the permit holder if necessary.
 - 5) Monthly measurement of leachate head can resume upon the collection of a compliant leachate head measurement at LPZ-101.
- g. Beginning in 2019, the permit holder shall annually sample and analyze leachate in accordance with the Leachate Sampling Plan (doc# 93043), dated August 27, 2018, as submitted by HLW Engineering Group and approved on October 25, 2018, and the following:
 - 1) An annual sample shall be collected in accordance with the plan and analyzed for the Appendix I metals, COD, BOD, pH, TDS, chloride, sulfate, calcium, magnesium, nitrates, sodium, carbonates, and potassium, and
 - 2) The results shall be reported annually in the LCSPE.
- h. The permit holder shall follow the approved Emergency Response and Remedial Action Plan (ERRAP) procedures during all emergencies pursuant to subrule 113.8(5). An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for permit modification to incorporate a facility expansion or significant changes in facility operation that require modification of the currently approved ERRAP.
- i. In the unlined portion of the MSWLF unit, leachate extraction wells LW-21, LW-22, LW-23, LW-24, LW-25, and LW-26 must be operated year-around.

The permit holder must maintain effective control of leachate in the unlined portion of the unit as determined through maintenance of the lowest feasible leachate head in this area and by complying with the environmental monitoring and corrective action requirements for groundwater and surface water. This shall be re-evaluated annually and presented in the LCSPE report.

3. Liner and leachate collection system construction shall take place in accordance with the plans and specifications contained in the Comprehensive Facility Design (doc #65983), dated July 21, 2011, as submitted by HLW Engineering Group, and approved on September 15, 2011; and the following:
 - a. The permit holder is not authorized to construct any new disposal cells.
 - b. The Leachate Control System construction documentation (doc #53146) dated June 6, 2002 regarding the construction of a toe drain along the east side of the site and leachate extraction capabilities from LW-1E, prepared by Terracon and approved on July 9, 2002; is incorporated into the permit.
 - c. The Construction Certification Report for Cell 1 and 2 Expansion and associated Record Drawings (docs #5910 and #8119), dated July 19 and September 4, 2007, respectively, as

submitted by FOX Engineering and approved on August 3, 2007, are incorporated into the permit.

- d. The Certification Report-FML Vents (doc #23157), dated May 29, 2008, as submitted by FOX Engineering and approved on June 18, 2008, is incorporated into the permit.
- e. The Quality Control and Assurance Plan contained in Section D, Appendix 2 of the 2010 Permit Renewal documentation (doc #56922), dated March 19, 2010, as submitted by HLW Engineering Group, is incorporated into the permit.
- f. The Construction Documentation Forms for Leachate Wells LW-21 through LW-25 (doc #63038), dated January 14, 2011, as submitted by HLW Engineering Group, are incorporated into the permit.
- g. The Cell 3 Expansion Quality Control and Assurance Report (doc #67044), dated October 19, 2011, as submitted by HLW Engineering Group and approved on October 25, 2011, is incorporated into the permit.
- h. The Construction Certification Report for the Leachate Collection and Conveyance System (Closed Area, doc #78155), dated September 26, 2013, as submitted by HLW Engineering Group and approved on December 2, 2013, is incorporated into the permit.
- i. The Quality Control and Assurance Report for the Leachate Storage Lagoon (doc #78687), dated November 21, 2013, as submitted by HLW Engineering Group and approved on December 2, 2013, is incorporated into the permit.
- j. The documentation for the construction of leachate extraction well LW-26 and abandonment of LW-1E (doc #84838), dated December 3, 2015, as submitted by HLW is incorporated into the permit.
- k. Documentation of the removal of the pilot study landfill cell, approved on September 8, 1994 for the study of crushed waste glass as a leachate drainage media, was included in the 2016 West Side Exploration Report (doc #86456), dated May 27, 2016, as submitted by HLW Engineering Group.
- l. The Cell 4 Expansion Quality Control and Assurance Report (doc #87123), dated September 6, 2016, as submitted by HLW Engineering Group and approved on September 15, 2016, is incorporated into the permit.
- m. The Cell 5 Expansion Quality Control and Assurance Report (doc #93014), dated August 15, 2018, as submitted by HLW Engineering Group and approved on August 20, 2018, is incorporated into the permit.

- n. Certification #1 of Additional Drainage Layer construction for the Cell 5 Expansion (doc #94973), dated April 24, 2019, as submitted by HLW Engineering Group and approved on May 9, 2019, is incorporated into the permit.
 - o. Certification #2 of Additional Drainage Layer construction for the Cell 5 Expansion (doc #95183), dated May 17, 2019, as submitted by HLW Engineering Group and approved on June 19, 2019, is incorporated into the permit.
 - p. Certification #3 of Additional Drainage Layer construction for the Cell 5 Expansion (doc #95365), dated June 13, 2019, as submitted by HLW Engineering Group and approved on June 19, 2019, is incorporated into the permit.
 - q. Record Drawings and Trench Cross Section Details for the ADS Tile Line, (doc #96793), dated January 15, 2020, as submitted by HLW Engineering Group, is incorporated into the permit.
 - r. The Construction Documentation for Landfill Gas Vents 1-6 (doc #98442), dated September 11, 2020, as submitted by HLW Engineering Group, is incorporated into the permit.
4. Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan contained in Section L of the of the 2021 Permit Renewal documentation (doc #99511), dated January 14, 2021, as submitted by HLW Engineering Group; and the following:
- a. The HMSP shall include the following:
 - Glacial Till/Fill/Bedrock Interface (Groundwater System #1) groundwater monitoring points:
 - Background points MW-4A and MW-18;
 - Downgradient groundwater monitoring compliance points MW-1R, MW-15R, MW-6A (Bethany Falls Limestone), MW-21, and GU-1; and
 - Downgradient attenuation zone compliance points Tile 1, Tile 2, and MW-21.
 - Exline Limestone (Groundwater System #4) groundwater monitoring points:
 - Background points MW-11C, MW-39D, MW-41D, and MW-42D;
 - Downgradient groundwater monitoring compliance point MW-17R; and
 - Downgradient attenuation zone compliance point MW-28.
 - Surface Water Monitoring Points:
 - Background point SW-1 and
 - Downgradient compliance point SW-2B.
 - Supplemental Downgradient Attenuation Zone Groundwater Monitoring Wells:
 - MW-8B, MW-9AR, and MW-14D.

Semiannual monitoring shall be conducted for the Appendix 1 parameters, and annual monitoring for dissolved methane, ethane, ethene, alkalinity, and pH, shall be conducted at these points until the DNR approves otherwise. These supplemental points are not compliance points and therefore are not subject to the requirements of 567 IAC 113.10(5)"c" and 113.10(6). The analytical results from these points shall be annually evaluated within the AWQR for the purpose of identifying changes to groundwater quality within the attenuation zones.

Passive Engineered Conveyance Structure Monitoring. Surface water monitoring point SW-102.

Corrective Action Monitoring Points:

- MW-31 and MW-32 – Annual Appendix I VOCs
 - Leachate Well LW-26 – Annual sampling and analysis for VOCs, cobalt, ammonia (as N), sulfate, chloride, TDS, BOD5, dissolved methane, ethane, ethene, alkalinity, and pH analysis; and
 - Gas Vents 1-6 – Quarterly analysis of the % Lower Explosive Limit.
- b. Groundwater elevations shall be collected semiannually from the following monitoring wells for use in the construction of groundwater contour maps and biennial evaluations of flow paths as required in 567 IAC 113.10(2)"f"(2):
- 1) Till/Fill/Interface – MW-8A, MW-14A, MW-27, and MW-30;
 - 2) Bethany Falls – MW-6B, MW-7A, and MW-23;
 - 3) Middle Creek – MW-4B, MW-6C, MW-11A, MW-14B, MW-24B;
 - 4) Hertha – MW-4C, MW-9B, MW-11B, MW-13, MW-14C, MW-19, MW-22B, MW-23B, MW-24C, and MW-33; and
 - 5) Exline & Above – MW-17.
- c. DNR construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. DNR construction documentation form 542-1323 shall be submitted within 30 days of establishing surface water monitoring points.

Installation documentation for Monitoring Well MW-7B (doc #8072), dated August 31, 2007, as submitted by FOX Engineering Associates, is incorporated into the permit.

Installation documentation for monitoring wells MW-13 through MW-19 and gas probes GP-1 through GP-6 (doc #49697), dated November 6, 2009, as submitted by FOX Engineering, are incorporated into the permit.

The MW-20 boring log and well construction documentation, included in Appendix A of the Assessment of Corrective Measures Report (doc #65717), dated July 1, 2011, as submitted by HLW Engineering Group, is incorporated into the permit.

The MW-16 abandonment documentation and replacement well MW-21 construction documentation (doc #73842), dated August 6, 2012, as submitted by HLW Engineering Group, are incorporated into the permit.

The boring logs and well construction documentation for monitoring wells MW-22 and MW-23, and MW-27 contained in Attachment D.5 of the letter (doc #79879) dated March 31, 2014, as submitted by HLW Engineering Group, is incorporated into the permit.

The MW-1R, MW-6C, MW-7C, MW-11C, MW-14A, MW-14B, MW-14C, MW-14D, MW-17R, MW-22B, MW-23B, MW-24B, MW-24C, MW-24D, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33 boring logs and monitoring well construction documentation included in Appendices B.1 and B.2 of the HIR Update (doc #82361), dated January 22, 2015, as submitted by HLW Engineering Group, are incorporated into the permit. The MW-14 and MW-22 abandonment documentation included in Appendix B.3 of the same submittal are also incorporated into the permit.

The MW-1 well abandonment and MW-7B well repair documentation (doc #84056), dated August 10, 2015, as submitted by HLW Engineering Group, is incorporated into the permit.

It was reported in the January 21, 2016 letter (doc #85229) from HLW Engineering Group that MW-20 and MW-25 were completely excavated and removed during site investigative activities.

The MW-9AR well construction and documentation, dated January 30, 2018 (doc#91413), as submitted by HLW Engineering Group, is incorporated into the permit.

The MW-15R well construction documentation and MW-15 abandonment documentation (doc #95187), dated May 16, 2019, as submitted by HLW Engineering Group is incorporated into the permit.

Well construction documentation for MW-34A, MW-34B, MW-34C, MW-35B, MW-36A, MW-36B, MW-37A, MW-37B, MW-37C, MW-37D, MW-38A, MW-38B, MW-39A, MW-39B, MW-39C, MW-39D, MW-40A, MW-40B, MW-41A, MW-41C, MW-41D, MW-42C, MW-42D, and MW-43; as contained in Section L of the 2021 Permit Renewal documentation (doc #99511), dated January 14, 2021, as submitted by HLW Engineering Group; is incorporated into the permit.

- d. The permit holder shall conduct background and routine semiannual groundwater sampling and analysis; as well as perform statistical tests for the approved monitoring points for Appendix I and turbidity in accordance with rule 113.10(455B). Groundwater samples shall **not** be field-filtered prior to laboratory analysis.
- e. The permit holder shall include in each AWQR an evaluation of TSS/turbidity data and other pertinent sampling and analytical results, to determine if representative samples of groundwater have been collected. If samples are not representative, the permit

holder may be required to utilize different sampling methods, consider new well construction with an optimized filter pack design, and/or additional well development. If sample quality does not improve with improved well construction, well development, and/or sampling methods, the DNR will consider higher TSS/turbidity levels as representative of site groundwater conditions.

- f. The frequency for full Appendix II analysis at monitoring points that are in assessment monitoring and have had at least two (2) rounds of analysis using the entire Appendix II list may be decreased to once every (5) five years. If monitoring points exit assessment monitoring and later return to assessment monitoring an additional two (2) rounds of analysis using the entire Appendix II list is required.
 - g. The permit holder shall semiannually measure groundwater elevations within 1/100 of a foot in each well and immediately prior to purging, each time groundwater is sampled.
 - h. An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater quality shall be submitted to the DNR's Solid Waste Section by January 31 each year. This report shall be prepared in accordance with subrule 113.10(10) by a qualified groundwater scientist pursuant to paragraph 113.10(1)"d" and by using the DNR Annual Water Quality Report Format.
 - i. The Corrective Action Plan described in the January 24, 2020 letter from HLW Engineering (doc #96858), consisting of the establishment and monitoring of a groundwater natural attenuation zone and construction and operation of 6 subsurface vents to address identified groundwater contamination at MW-8B, MW-9AR, and MW-14D, was approved on June 4, 2020 and is incorporated into the permit.
5. The permit holder is authorized to recirculate leachate in accordance with the Leachate Recirculation Operation Plan (doc# 93043), dated August 27, 2018, as submitted by HLW Engineering Group and approved on October 25, 2018; and the following:
- a. Leachate recirculation methods are limited to spray irrigation on disposal areas with daily or intermediate cover, and recirculation within a trench excavated in an existing waste mass.
 - b. Leachate application is restricted to only those MSWLF units with a composite liner constructed in accordance with paragraph 113.7(5)"a".
 - c. The leachate recirculation system shall not contaminate waters of the state, contribute to erosion, damage cover material, harm vegetation, or spray persons at the MSWLF facility, pursuant to paragraph 113.8(2)"h".
 - d. Leachate shall not be applied on user vehicle access areas.

- e. Leachate shall not be applied to vegetated areas or frozen waste cover. A means of frost protection must be provided for all leachate control elements.
 - f. Leachate shall be applied evenly on the working area.
 - g. Leachate recirculation shall be conducted only during hours of operation and when an operator is on duty.
 - h. Leachate shall be applied in a manner such that ponding or runoff will not occur.
 - i. Leachate recirculation shall be controlled such that not more than one foot of leachate head will be allowed to accumulate above the MSWLF unit liner.
 - j. Records shall be maintained as to the time and quantities of leachate application and be submitted with the facility Annual Leachate Control System Performance Evaluation Report (LCSPER).
 - k. Leachate recirculation shall be immediately terminated if it causes ponding, runoff, excessive odor, vector control problems, vapor drift, ice formation, or operational problems. The DNR's local Field office shall be immediately notified if any of the above events occur.
6. The permit holder shall conduct subsurface gas monitoring in accordance with the Gas Monitoring Plan contained in Section L of the of the 2021 Permit Renewal documentation (doc #99511), dated January 14, 2021, as submitted by HLW Engineering Group; and the following:
- a. The permit holder shall quarterly monitor and annually report site methane concentrations in accordance with rule 113.9(455B). Specific actions, as defined in the rules, shall be taken in the event of methane gas level limit exceedances.
 - b. The permit holder shall annually submit a report by January 31 summarizing the methane gas monitoring results and any action taken resulting from gas levels exceeding the specified limits during the previous 12 months as a supplement to the facility Annual Water Quality Report, as defined in subrule 113.10(10).
 - c. Documentation of the establishment of utility trench gas monitoring points GP-7 and GP-8 (doc #66181), dated August 4, 2011, as submitted by HLW Engineering Group and approved on September 15, 2011, is incorporated into the permit.
7. The permit holder is authorized to accept foundry sand and foundry composite (consisting of approximately 97% foundry sand and dust collector wastes and 2% treated magnesium dross sludge) from the Fansteel Wellman Dynamics facility in Creston, Iowa. The permit holder is authorized to use a foundry sand or foundry composite/soil combination as an alternative daily cover material, subject to the following:

- a. The percentage of foundry sand and/or foundry composite to soil shall not exceed 50% by volume foundry sand and/or foundry composite. Quantities of either foundry material exceeding 1-week usage shall be disposed in the workplace area. Only foundry sand and/or foundry composite placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved foundry sand or foundry composite) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.

Pursuant to Iowa Code section 455B.310(9), foundry sand used by a sanitary landfill as daily cover is exempt from imposition of the tonnage fee if the foundry sand is generated by a foundry located within the state and if the foundry sand is provided to the permit holder at no cost to the permit holder.

- b. The foundry sand or foundry composite/soil mixture may be used in lieu of the 6-inch daily cover requirement. This material shall not be used as a substitute for intermediate or final soil cover.
- c. The waste must be compacted, before the foundry sand or foundry composite/soil mixture is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage.
- d. The foundry sand or foundry composite/soil mixture shall be applied to the active waste face at the end of each day of operations and more frequently if necessary to control fire or fire hazards, blowing litter, scavenging, odors, insects, and rodents.
- e. The soil ratio shall be increased, if necessary, to optimize cover performance relative to the criteria stated in items "c" and "d" above.
- f. The permit holder shall scarify the foundry sand or foundry composite/soil mixture over the working face area on which it is applied prior to each day's use of that area as a working face.
- g. The permit holder shall maintain in the landfill files appropriate quarterly laboratory analytical documentation that demonstrates that the foundry sand or foundry composite is not hazardous by TCLP metals testing. Documentation of such testing shall be submitted to both the Department's Main and local Field office.
- h. The use of the foundry sand or foundry composite/soil mixture for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the Department.
- i. If the foundry sand or foundry composite/soil mixture is found by the Department not to be performing satisfactorily, its use shall be discontinued and the remaining materials shall be disposed in the working face.

8. The permit holder is authorized to accept and temporarily store a maximum of 1500 waste tire equivalents for the purpose of reclamation processing or disposal. Tire storage and processing shall be conducted at approved plan locations. The tires shall be removed at least once every 120 days and transported to the appropriate reclaimer/processor, or disposed of at the site. All operations shall be in accordance with subrule 109.10(3), IAC 567 Chapter 117 and the current local fire code.
9. The permit holder is authorized to temporarily store white goods and scrap metal in an area designated by the operator. No discarded appliance may be stored for more than 270 days without being demanufactured. No scrap metal or discarded appliance may be stored for more than a total of twelve (12) months, including demanufacturing processing, prior to being recycled/salvaged. The operator and salvaging contractor shall comply with applicable provisions of IAC 567 Chapter 118 and the General Provisions of this permit. No scavenging shall be allowed.
10. The permit holder is authorized to collect and temporarily store rigid recyclable wastes (e.g., metal cans, glass bottles and plastic bottles) and fiber recyclable wastes (e.g., magazines, catalogs, books, envelopes and paper) in segregated recycling boxes located near the landfill entrance. The following conditions and procedures shall apply:
 - a. The recyclables shall not be stored for a period exceeding six (6) months.
 - b. The recycle boxes shall be fitted with lids to prevent precipitation entry and to control litter.
 - c. Separate boxes should be provided to segregate metals and plastics to facilitate recycling recovery.
 - d. Recycling boxes shall be labeled to facilitate public use.
 - e. Records shall be maintained to document amounts of waste recycled for quarterly Solid Waste Fee reporting and the dates that each box content is removed from the site for recycling to confirm storage time limitations.
 - f. Recycling activities shall be monitored to insure that no other disposable wastes are stored in recycle boxes.
 - g. Farm chemical containers shall not be stored in recycling boxes. Separate authorization for this purpose shall be secured by permit amendment.
11. In accordance with the variance approval (doc #90855) dated November 14, 2017; the permit holder is authorized to directly, and immediately upon receipt, dispose of untreated petroleum contaminated soils (PCS) at the working face in accordance with the following:
 - a. The PCS must be determined to be non-hazardous (via federal exemption and/or analytical testing) and immediately buried at the working face.

- b. The untreated PCS must not contain free liquids as determined by the paint filter liquids test (EPA Method 9095), nor exhibit one of the four characteristics of a hazardous waste defined in 40 CFR Part 261 Subpart C for ignitability (D001), corrosivity (D002), reactivity (D003) and toxicity (D004-D0043).
 - c. PCS resulting from the cleanup of petroleum underground storage tanks are exempt from RCRA hazardous waste management if the media and debris 1) exhibit the TC for D018-D043, and 2) are subject to the corrective action requirements in 40 CFR Part 280 of the UST regulations. This exemption does not apply to petroleum contaminated media resulting from spills or releases from aboveground storage tanks, other surface spills, or if the PCS become contaminated with a listed hazardous waste.
 - d. PCS meeting the above-referenced criteria is deemed a "solid waste" and therefore applicable waste flow and tonnage fee requirements will need to be followed. PCS may continue to be received for remediation pursuant to subrule 109.11(2), or accepted from outside the planning area for disposal as long as the provisions of IAC 567 Chapter 101.4 are followed (i.e. maintain written approvals).
12. The permit holder shall close the landfill site in accordance with the Closure and Postclosure Plan contained in Section I of the of the 2021 Permit Renewal documentation (doc #99511), dated January 14, 2021, as submitted by HLW Engineering Group; and the following:
- a. The Construction Certification Report and Record Drawings (doc #53101) dated February 16, 2006, as submitted by FOX Engineering related to the installation of a 4-foot thick compacted clay cap as partial closure of the permitted vertical expansion of the South Central Iowa Sanitary Landfill and approved on April 27, 2006, is incorporated into the permit.
 - b. The Quality Control and Assurance Report, Closure of Unlined Areas (doc #63289), dated January 25, 2011, documenting construction of final cover during 2007-2010 over a total area of approximately 11.8 acres, as submitted by HLW Engineering Group and approved on March 9, 2011, is incorporated into the permit.
 - c. The 2011 Closure of Unlined Areas report (doc #68146) dated December 30, 2011, as submitted by HLW Engineering Group and approved on March 28, 2012, is incorporated into the permit. This report presented documentation that final cover, previously constructed on two areas of the landfill, was constructed in accordance with the rules in effect at the time waste disposal ceased in those areas. The report also included documentation that final cover was constructed over the 2.2 acre future Cell 5 abutment area.

With the above submittal, the permit holder has demonstrated that final cover, compliant with the rules in effect when waste disposal ceased in each area, has been constructed over the entirety of the unlined disposal area .