



May 17, 2022

JOHN ROOSA
BOONE COUNTY SANITARY LANDFILL
1268 224TH LANE
BOONE IA 50036

RE: Boone County Sanitary Landfill
Permit No. 08-SDP-01-75P
Permit Revision

Dear Mr. Roosa:

Enclosed is the revised permit for the Boone County Sanitary Landfill. The permit and the approved plans must be kept at the sanitary disposal project in accordance with paragraph 113.11(1)"a. Please review the permit with your operators, as they must become familiar with it.

The revision approves the Well Plugging Request for MW98-33, the Construction Documentation for MW21-43, and the Passive Engineered Conveyance Structure Construction Certification.

Note that the permit contains special provisions that may require a response or action by you which, if not properly complied with, may prompt enforcement action by this department.

For any questions, please contact me at 515-587-7638 or geoffrey.spain@dnr.iowa.gov.

Sincerely,

Geoffrey Spain Digitally signed by Geoffrey Spain
Date: 2022.05.17 08:48:11 -05'00'

Geoffrey Spain
Land Quality Bureau

copy: Todd Whipple
HLW Engineering Group
204 West Broad Street
P.O. Box 314
Story City, IA 50248

DNR Field Office #5

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

I. Permit Number: 08-SDP-01-75P

II. Permitted Agency: Boone County Board of Supervisors

III. Project Location: Part of the SE ¼ of Section 6, T83N, R26W, Boone County, Iowa

IV. Responsible Official
Name: John Roosa, Landfill Administrator
Address: 1268 224th Lane
Boone, IA 50036
Phone: (515)433-0591
FAX: (515)433-0545

V. Licensed Design Engineer
Name: Douglas J. Luzbetak, P.E., HLW Engineering
Address: 204 W. Broad St.
PO Box 314
Story City, IA 50248
Phone: (515)733-4144
FAX: (515)733-4146
Iowa License Number: 12654

VI. Date Permit Issued: 3/12/19

VII. Permit Expiration Date: 3/12/24

VIII. Issued by: Geoffrey Spain Digitally signed by Geoffrey Spain
Date: 2022.05.17 08:42:13 -05'00'
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 Central Iowa Solid Waste Management Association Comprehensive Plan. The Comprehensive Plan as approved by the DNR on February 12, 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, excluding Sheldahl, and the unincorporated area in Boone County; all cities, excluding Jefferson, and the unincorporated area in Greene County; all cities, Ames, Cambridge, Gilbert, Huxley, Kelley, Maxwell, McCallsberg, Nevada, Roland, Slater, Story City, Zearing and the unincorporated area in Story County; the Cities of Bouton, Granger, and Woodward and Woodward State Hospital in Dallas County; and the Cities of Farnhamville, Lohrville, and Somers in Calhoun 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, dated February 21, 2008, as submitted by FOX Engineering and approved on January 14, 2009, and the following:
 - a. Waste disposal is limited to Phases 4-R, 5-R, 6-R, 7-R, including the associated abutment areas. The site vertical height shall not exceed a maximum waste elevation of 1154 feet in these cells. Any further expansion beyond these phases shall require prior DNR approval.
 - b. 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 City of Boone publicly owned treatment works (POTW). 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).

- c. The following shall be recorded by the permit holder and reported in the LCSPER for each leachate thickness measurement that equals or exceeds 12 inches:
 - 1) Date of original and any verification measurement.
 - 2) If 12 inch or greater leachate column is verified, specific actions taken by the certified operator to lower leachate thickness, or an explanation why specific actions were not necessary.
 - 3) Date and results of follow-up measurement.
 - 4) Repeat steps 2 and 3 as necessary until a compliant measurement is collected.
 - d. 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.
3. The permit holder is authorized to construct the liner and leachate collection system in accordance with the Revised Plans and Specifications for Site Development, dated December 8, 2010 and amended June 14, 2011, both as submitted by HLW Engineering Group; and the following:
- a. The permit holder shall notify the DNR and have the site inspected when the construction of a new Municipal Solid Waste Landfill Unit (MSWLF) unit or significant components thereof has been completed, in accordance with subrule 113.4(6). Prior to the inspection, the Quality Control & Assurance officer shall submit a final report to the DNR that verifies compliance with the requirements of rule 113.7 and the approved plans and specifications. No waste disposal shall commence in any newly constructed unit or portion thereof until it has been inspected and approved by the DNR.
 - b. The Quality Control and Assurance Report for the Phase 7-R Expansion, dated February 19, 2016, submitted by HLW Engineering Group, is hereby approved and incorporated into the permit documents. Phase 7-R may now be used for waste disposal.
 - c. The permit holder shall notify the DNR and have the site inspected when the construction of a new MSWLF unit or significant components thereof has been completed, in accordance with subrule 113.4(6). Prior to the inspection, the QC&A officer shall submit a final report to the DNR that verifies compliance with the requirements of rule 113.7 and the approved plans and specifications. No waste disposal shall commence in any newly constructed unit or portion thereof until it has been inspected and approved by the DNR.

- d. The Construction Certification Report for the Phase 2 and 3 Expansion dated December 12, 1996, as submitted by FOX and approved on January 9, 1997, is incorporated as part of the permit documents.
- e. The 1996 Phase 2 and 3 Expansion Construction Certification Report dated May 1, 1997, and the As-Constructed Record Drawings (4 sheets) dated May 1, 1997, both submitted by FOX and approved on May 14, 1997; are incorporated as part of the permit documents.
- f. The Iowa Professional Engineer Certification of Alternative Landfill Liner System dated April 8, 1998, and contained in the 1998 Liner Performance Study dated April 1998, as submitted by FOX and approved on June 8, 1998, satisfies the requirements of subparagraph 113.7(5)"a"2. The approved alternative liner system for this facility is applicable to Phases 4-R, 5-R, and 6-R. This liner consists of a four foot compacted soil liner with a maximum coefficient of permeability of 1×10^{-7} cm/sec.
- g. The Construction Certification Report for the 1994 Phase 1 Expansion, dated October 5, 1998, as submitted by FOX and approved on February 18, 1999, is incorporated as part of the permit documents.
- h. The As-Constructed Record Drawings for the 1994 Phase 1 Expansion, dated November 3, 1998, as submitted by FOX and approved on January 15, 1999, are incorporated as part of the permit documents.
- i. The Construction Certification Report for the Phase 4-R Expansion, dated November 9, 1999, as submitted by FOX and approved on November 24, 1999, is incorporated as part of the permit documents.
- j. The As-Constructed Record Drawings for the Phase 4-R Expansion, dated May 18, 2000, as submitted by FOX and approved on June 14, 2000, are incorporated as part of the permit documents.
- k. The Phase 4-R Expansion Record Drawing (Sheet 6), as submitted by FOX under transmittal letter dated September 7, 2000, and approved on September 20, 2000, is incorporated as part of the permit documents.
- l. The Construction Certification Report for the Phase 4-R Expansion Liner Extension, dated June 1, 2001, as submitted by FOX and approved on June 25, 2001, is incorporated as part of the permit documents.
- m. The Construction Certification Report for the Phase 5-R Expansion, dated September 14, 2001, as submitted by FOX and approved on September 24, 2001, is incorporated as part of the permit documents.

- n. The As-Constructed Record Drawings for the Phase 5-R Expansion, dated December 17, 2001, as submitted by FOX and approved on February 4, 2002, are incorporated as part of the permit documents.
- o. The Construction Certification Report for the Phase 6-R Expansion, dated October 7, 2003, as submitted by FOX and approved on October 28, 2003, is incorporated as part of the permit documents.
- p. The As-Constructed Record Drawings for the Phase 6-R Expansion, dated December 19, 2003, as submitted by FOX and approved on January 22, 2004, are incorporated as part of the permit documents.
- q. The Construction Documentation Form for LPZ05-11, dated April 6, 2005, as submitted by Fox and approved on July 15, 2005, is incorporated as part of the permit documents.
- r. The Construction Certification Report, dated July 25, 2005 and pertaining to the construction of an intermediate liner on the east slope of Area C, as submitted by FOX and approved on October 14, 2005, is incorporated as part of the permit documents.
- s. The construction documentation for LPZ-8A and LPZ-12, dated March 21, 2006, as submitted by FOX and approved on May 3, 2006, is incorporated as part of the permit documents.
- t. The Construction Certification Report - Abutment Area, dated June 11, 2007, and the addendum, dated November 6, 2007, both submitted by FOX and approved on July 17, 2008, are incorporated as part of the permit documents.
- u. The Construction Certification Report - Abutment Area, dated July 8, 2008 and covering a portion of the abutment liner that received freeze/thaw protection, as submitted by FOX and approved on July 17, 2008, is incorporated as part of the permit documents.
- v. The construction documentation for LPZ-13C, dated November 17, 2007, as submitted by FOX and approved on July 17, 2008, is incorporated as part of the permit documents.
- w. The Extraction Well Construction Documentation Forms for EW-1 and EW-2, dated January 24, 2008, as submitted by FOX and approved on July 17, 2008, are incorporated as part of the permit documents.
- x. The Record Drawings for the Leachate Extraction/Groundwater Collection Project, dated February 4, 2008, as submitted by FOX and approved on July 17, 2008, are incorporated as part of the permit documents.
- y. The Construction Certification Report, Groundwater Valve Abandonment, dated September 14, 2009, as submitted by FOX Engineering, is incorporated as part of the permit documents. As a result of this project, the groundwater cutoff trench piping located along the west slope of Phase 4-R and west and north slopes of Phase 5-R now

discharges into the leachate collection system, and the liner underdrain system discharges at monitoring point GWD-2.

- z. The Quality Assurance/Quality Control Report, Abutment Liner – Phase 2, dated September 16, 2009, as submitted by FOX Engineering, is incorporated as part of the permit documents.
 - aa. The Quality Control and Assurance Report, Reconditioned Liner- 2010, dated September 24, 2010, as submitted by HLW Engineering Group, is incorporated as part of the permit documents.
 - bb. The Construction Certification Report, Groundwater Piping Modifications, dated January 11, 2011, as submitted by HLW Engineering Group, is incorporated into the permit. At this time, all flow from the groundwater diversion systems is directed into the leachate storage tanks.
 - cc. The construction documentation for the installation of LPZ-11R, dated June 15, 2012, as submitted by HLW Engineering Group is incorporated into the permit.
 - dd. The Plans and Specifications for the Phase 8-R Expansion, dated February 3, 2021, are approved and included in the permit documents.
 - ee. The QC&A Report for the Phase 8-R Expansion, dated November 10, 2021, as submitted by HLW Engineering Group, is approved and included in the permit documents. Phase 8-R may now be used for waste disposal.
4. Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan (HMSP), located in Section “F” of the permit renewal documents, dated November 13, 2018, as submitted by HLW Engineering Group and hereby approved; and the following:
- a. The HMSP shall include groundwater monitoring points; Background monitoring points MW91-8, MW02-15A, MW88-2, MW02-30A and MW98-28; Downgradient monitoring points MW21-43, MW94-18, MW09-40, MW91-10, MW96-21, MW96-24, MW96-23, MW88-3, GWD-1, and UD-3; Corrective Action Points SRAMP #1, SRAMP #2, MW96-25, MW06-37, MW06-38, and MW06-39.
 - b. 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.
 - c. 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 total suspended solids (TSS) in accordance with rule 113.10(455B). Groundwater samples shall **not** be field-filtered prior to laboratory

analysis and total suspended solids shall be analyzed using Method 1376585, with a reporting limit goal of ≤ 2 mg/l). Turbidity measurement may be approved by the DNR in lieu of TSS, provided a correlation between the two is established.

- d. 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 low flow or no-purge 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.
- e. 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.
- f. 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.
- g. The permit holder shall collect semiannual groundwater elevation measurements in order to measure the separation of the base of the MSWLF unit from the groundwater table as required in paragraph 113.6(2)"i". This data shall be included in the facilities' AWQR.
- 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".
- i. The Site Remedial Action/Mitigation Plan, dated April 2, 2007 by FOX and approved on April 16, 2007, is incorporated as part of the permit documents. In addition to the required operation of the leachate extraction/groundwater collection system described in this plan, the permit holder shall perform the following:
 - 1) Leachate head levels shall be measured on a monthly basis in leachate head piezometers LPZ-2R, LPZ-3, LPZ-6R, LPZ-8A, LPZ-9, LPZ-10, LPZ-12, LPZ-13C, LPZ-14, LPZ-15, LPZ-16, and wells EW-1 and EW-2 to determine the effects of operation of the leachate extraction system.
 - 2) Monthly leachate head levels and pumping well flow rates will be reported to the Department on a quarterly basis and summarized annually in the LCSPER.

- 3) After one year operation of the system, if the lowest possible leachate head has not been achieved at each of the leachate head piezometers monitored above, the Department will require the installation of additional pumping wells.
- j. The As-Constructed Data for monitoring wells MW-40 and MW-41, dated August 31, 2009, as submitted by FOX Engineering, is incorporated as part of the permit documents.
- k. The well abandonment documentation forms for monitoring wells MW85-3, MW91-12, MW91-13, MW94-16, and MW94-17, dated August 9, 1999, as submitted by the permit holder and approved on August 9, 1999, are incorporated as part of the permit documents.
- l. The documentation form for the construction of monitoring well MW00-36, as attached to the March 2, 2000, transmittal letter from FOX and approved on June 14, 2000, is incorporated as part of the permit documents.
- m. The Abandoned Water Well Plugging Records for monitoring wells MW94-15, MW98-29, and MW98-30, dated May 19, 2003, as submitted by FOX and approved on March 11, 2003, are incorporated as part of the permit documents.
- n. The construction documentation forms for monitoring wells MW02-15A, MW02-29A, and MW02-30A, as contained in Appendix G of the 2002 Development and Operational Plans and Specifications, dated November 26, 2002, as submitted by FOX and approved on March 11, 2003, are incorporated as part of the permit documents.
- o. The Abandoned Water Well Forms for monitoring wells MW98-31, MW98-32, and MW98-34, dated April 8, 2005, as submitted by FOX, are incorporated as part of the permit documents.
- p. The boring logs and monitoring well construction documentation forms for monitoring wells MW06-37, MW06-38, and MW06-39, dated March 21, 2006, as submitted by FOX and approved on May 2, 2006, are incorporated as part of the permit documents.
- q. The Abandoned Water Well Forms for monitoring well MW94-19, dated October 26, 2020, as submitted by HLW Engineering Group, are incorporated as part of the permit documents.
- r. The Abandoned Water Well Plugging Records for TMW-1, TMW-2, TMW-3, and MW16-42, dated March 23, 2021, as submitted by HLW Engineering Group, are approved and incorporated in the permit documents.
- s. The Well Plugging Request & Well Plugging Method Request, dated December 22, 2021, as submitted by HLW Engineering Group, is approved and included in the permit documents.

- t. The Construction Documentation Forms for monitoring well MW21-43, dated January 17, 2022, as submitted by HLW Engineering Group, are approved and included in the permit documents.
 - u. The Passive Engineered Conveyance Structure Construction Certification, dated May 5, 2022, as submitted by HLW Engineering Group, is approved and included in the permit documents.
5. The permit holder shall conduct subsurface gas monitoring in accordance with the GMSP, located in Section "F" of the permit renewal documents, dated November 13, 2018, as submitted by HLW Engineering Group, and hereby approved, 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).
6. Based on a completed and certified site risk assessment meeting the requirements outlined in Iowa Code section 455B.305(6), the permit holder was conditionally exempted under the permit renewal dated June 30, 1995 from providing and implementing a leachate control plan for Areas A, B, and C that received wastes prior to July 1, 1992.

Continued exemption is subject to control of leachate at the site and compliance with the groundwater sampling and analysis requirements pursuant to subrule 113.10(4). In the event that these conditions are violated, the permit holder shall be required to comply with the environmental corrective action requirements pursuant to rule 113.10.

7. The permit holder is authorized to operate a satellite temporary storage center for the collection of eligible household hazardous material (HHM) and hazardous wastes from conditionally exempt small quantity generators (CESQG) from the approved service area and in accordance with the (hereby) approved operations plan, dated DATE, as submitted by the permit holder. All eligible wastes collected at this facility shall be temporarily stored in 55-gallon drums or totes to be kept inside the approved building. Periodically, the wastes will be transported to the host site at the Metro Waste Authority Regional HHM RCC facility under permit #77-SDP-46-94P-HHM for lab packing and transport to a permitted hazardous waste disposal facility. Hazardous material shall not be stored for longer than 180 days.
8. The permit holder is authorized to collect, process, grind, or chip trees, limbs, brush, and clean wood wastes free of coatings and preservatives, for the purposes of reuse as bedding material, mulch, soil conditioner, compost bulking material; or for other beneficial reuses, in accordance with the following:

- a. Trees, limbs, brush, and clean wood wastes shall not be stored for a period exceeding twelve (12) months before processing.
 - b. Ground or chipped materials shall not be allowed to accumulate such that the stockpiles are not completely reused within twelve (12) months of initial stockpiling.
 - c. The processed materials may be used as mulch or soil conditioner for off-site purposes and on landfill areas with intermediate and final cover and on soil borrow areas.
 - d. Mulch or soil conditioner applied to existing vegetated landfill areas shall be applied at a rate such that established vegetation is not adversely impacted by its use.
9. The permit holder is authorized to compost yard waste in an area designated for composting activities. All composting activities shall be in accordance with IAC 567 Chapter 105.
10. In accordance with the disposal of untreated petroleum contaminated soils (PCS) variance request to 567.109.11(2) dated October 10, 2017, and approved November 15, 2017, as submitted by HLW Engineering Group, the permit holder is authorized to directly dispose of untreated PCS at the working face for a period to coincide with the solid waste permit and the following:
 - a. The PCS must be immediately buried at the working face pursuant to 567.113.8(1)"b"(3).
 - b. The untreated PCS must not contain free liquids pursuant to 567.113.8(1)"b"(1).
 - c. PCS resulting from the cleanup of petroleum underground storage tanks are exempt from RCRA hazardous waste management if the soil 1) exhibits 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 above ground storage tanks, other surface spills, or if the PCS becomes 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 adhered. 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).
11. The permit holder is authorized to use an alternative daily cover by the trade name *POSI-SHELL*, as a substitute for the six-inch daily soil cover requirement. Use of this material is subject to the following:
 - a. This product shall not be used as a substitute for intermediate or final soil cover.

- b. All landfill operations personnel shall be trained by the alternative cover material manufacturer, or by an operator that has been trained by the manufacturer. The operator shall ensure that the product slurry is prepared according to the manufacturer's nominal slurry mix specifications.
 - c. The waste shall be compacted, before this product is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage.
 - d. This product 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, rodents, birds and other vectors. This product shall be cross applied when necessary to provide effective cover.
 - e. If this product does not set within **one hour** of application, the workface shall be covered with six inches of compacted soil or a fresh application of this product. The term set means form a cohesive barrier layer that adheres to the waste and resists washing off by precipitation. This product shall not be exposed for more than **five (5) days**. After five days, any area exposed with this product shall be either covered with a new lift of waste, a fresh application of this product, or six inches of compacted soil.
 - f. The operator shall inspect each application of this product for thorough coverage and cover integrity. If operational problems arise from the use of this product or its method of application, the use of this product shall be suspended until proper corrections are made by the operator, with six inches of compacted daily cover being utilized during this interim period.
 - g. If, at any time, the DNR or permit holder deems this product to be ineffective or otherwise unsatisfactory, the permit holder shall immediately revert to soil or another previously approved alternative daily cover. The permit holder shall immediately notify the DNR's Main and local Field office through both written and verbal notification of this action. This notification is not necessary if use of this product ceases only on a temporary basis, such as during adverse operational or weather conditions.
 - h. Nothing in this provision shall be construed to authorize any waiver from the requirements of any other applicable state solid waste laws or regulations, or any deviations from permit provisions.
 - i. This provision shall not be interpreted to release the permit holder from responsibility under the Groundwater Protection Act for remedying conditions resulting from any release of contaminants to the environment.
12. 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.

13. The permit holder is authorized to collect and temporarily store used oil for recycling purposes. The storage tank(s) shall be designed and maintained to prevent the spillage or discharge of used oil. Absorbent material shall be available at the tank site for use by the operator to control used oil spillage or discharge. The used oil shall be processed in accordance with IAC 567 Chapter 119. The maximum length of time for storage is twelve (12) months.
14. 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.
15. The permit holder is authorized to accept and temporarily store lead acid batteries for recycling purposes. Lead acid batteries must be stored in a designated area which will curtail movement of acids and provide proper ventilation of gases from the batteries. The maximum length of time for storage is twelve (12) months.
16. The permit holder is authorized to designate an area to reclaim and temporarily store clean pallets for recycling. The maximum length of time for the material storage is four months.
17. The permit holder is authorized to accept ground tree and brush debris from the August 10, 2020 derecho. The permit holder authorized to use a ground tree and brush debris and soil combination as an alternative cover material, subject to the following:
 - a. The ratio of wood to soil shall not exceed 50% wood by volume. Only wood placed at a ratio of 6:1 (6 tons of waste to 1 ton of approved wood) will be considered alternative daily cover. Any material used in excess of that ratio shall be reported as waste.
 - b. The wood/soil combination may be used in lieu of the 6-inch daily cover requirement. Wood/soil combination shall not be used as a substitute for intermediate or final soil cover.
 - c. The waste must be compacted, before the wood/soil combination is applied, to provide an even surface to minimize ponding, prevent pockets, and to maximize uniform surface drainage
 - d. The wood/soil combination 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.
 - a. The permit holder shall scarify the wood/soil combination cover material over the working face area on which it is applied prior to each day's use of that area as a working face.
 - b. The use of wood/soil combination for daily cover usage by any other generator than the one approved above shall be subject to specifications approval by the DNR.
 - c. If the wood/soil combination is found by the DNR not to be performing satisfactorily, its use shall be discontinued and the remaining materials shall be disposed in the working face.
18. The permit holder shall close the landfill site in accordance with the Closure and Post Closure Plans included in the SDP Permit Renewal documents dated December 8, 2010, as submitted by HLW Engineering; and the following:
- a. The Permit Renewal - Closure Information, certifying final cover installation over the unlined Areas A and B, dated July 27, 1998, as submitted by FOX and approved on July 30, 1998, is incorporated as part of the permit documents.
 - b. The Construction Certification, certifying final cover installation over portions of Phases 1 and 2, dated November 9, 1999, as submitted by FOX and approved on November 24, 1999, is incorporated as part of the permit documents.
 - c. The Quality Control and Assurance Report, Documentation for Existing Closed Areas, dated January 21, 2011, as submitted by HLW Engineering Group, is incorporated into the permit. This submittal documented the presence of final cover on a 6.4 acre of Area C that was previously constructed.
 - d. The Quality Control and Assurance Report, dated July 6, 2011, as amended by the December 6, 2011 report, both submitted by HLW Engineering Group, is approved and incorporated into the permit. These submittals document that final cover construction has been completed on the 1 acre area in Area C that was not covered by the final cover construction project described in Amendment #5, Item 1, dated February 21, 2011.

In accordance with subrule 113.12(7), the Department approves the access road, as shown on Sheet 1 of the December 6, 2011 submittal, as a suitable temporary alternative to final cover until such time that the corresponding compliant abutment liner is constructed.

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.

- e. Effective control of leachate in unlined units shall be evaluated on a case-by-case basis to determine how to achieve the lowest possible leachate head; and by complying with the environmental monitoring and corrective action requirements for groundwater and surface water.

Date	Comment
11/22/19	Approval of Recirculation and Removal of Alternative Intermediate Spray Cover
12/13/19	Approval of pallet storage for recycling
9/25/2020	Approval of request to use ground wood waste from 2020 Derecho
10/09/2020	Removal of Leachate Recirculation
12/2/2020	Approval of Well Abandonment records for MW94-19
2/18/2021	Approval of Plans and Specifications for the Phase 8-R Expansion
4/14/2021	Approval of Well Plugging Records for TMW-1, TMW-2, TMW-3, and MW16-42
11/22/2021	Approval of QC&A Report for Phase 8-R Expansion
5/17/22	Approval of Well Plugging Request of MW98-33
5/17/22	Approval of Construction Documentation for MW21-43
5/17/22	Construction Certification of Passive Engineered Conveyance Structure