

CLOSURE PLAN

CFR 257.102(b)

CCR Landfill

Rockport Plant
Spencer County, Indiana

October 2016
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Prepared for: Indiana Michigan Power Company– Rockport Plant

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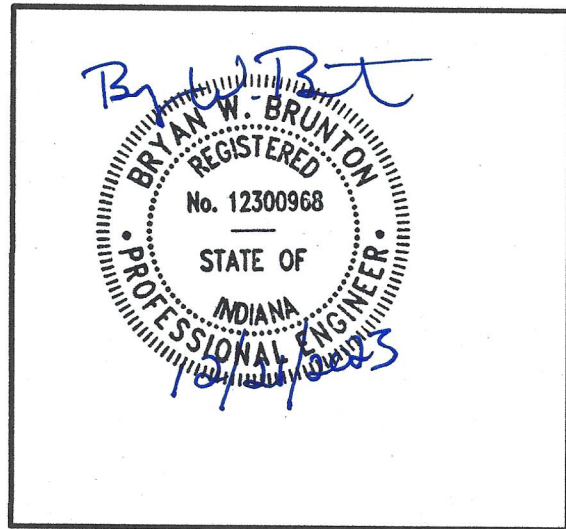
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CFR 257.102(b)
ROCKPORT PLANT
CCR LANDFILL

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I certify to the best of my knowledge, information, and belief that the information contained in this closure plan meets the requirements of 40 CFR § 257.102

I certify to the best of my knowledge, information and belief that design of the final cover system as described in this closure plan meets the requirements of 40 CFR § 257.102.

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1.0 OBJECTIVE

This report was prepared by AEP- Geotechnical Engineering Services (GES) section to fulfill requirements of CCR 257.102(b) for Closure Plans of Existing CCR Units.

2.0 DESCRIPTION OF THE CCR UNIT

The Rockport Power Plant is located near Rockport, Indiana

It is owned and operated by Indiana Michigan Power Company (I&M). The facility operates a landfill for the disposal of CCR materials.

The landfill is permitted by the Indiana Department of Environmental Quality (IDEQ) under RWS 1 Landfill permit FP-74-02. The landfill is divided into Area 1A and Area 1B with a permitted footprint of 554 acres. Area 1A is currently active and developed and is 186 acres that is permitted to receive Type I and Type II coal combustion residual wastes for a capacity of 13.6 million cubic yards of storage. With the Rockport Plant scheduled to close in 2028 Area 1B is not anticipated to be used for CCR disposal.

Approximately 53 acres of the 186 acres has been closed and capped with a low permeable cohesive soil prior to 2015.

3.0 DESCRIPTION OF CLOSURE PLAN 257.102(B)(1)(I)

[A narrative description of how the CCR unit will be closed in accordance with this section]

The Rockport landfill will be closed periodically during the life capacity of the facility.

4.0 CLOSURE IN PLACE 257.102 (b)(1)(iii)

[If closure of the CCR unit will be accomplished by leaving the CCR in place, a description of the final cover system, designed in accordance with paragraph(d) of this section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.]

4.1 CLOSURE PERFORMANCE STANDARDS 257.102 (d)(1)

4.1.1 SECTION 257.102(d)(1)(i)

[Control, minimize or eliminate, the maximum extent possible extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere.]

The final cover system is designed to minimize infiltration into the landfill.

4.1.2 SECTION 257.102(d)(1)(ii)

[Preclude the probability of future impoundment of water, sediment, or slurry.]

The final surface areas will be graded to a minimum slope of 2% to prevent the ponding of surface water runoff. Drainage features will be designed to have positive drainage.

4.1.3 SECTION 257.102(d)(1)(iii)

[Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period.]

The final cover system will be composed of 3:1 slopes terminating along benches that are graded with a minimum of 2% slope. The final configuration of the facility will meet the stability requirements to prevent the sloughing or movement of the final cover system during the closure and post-closure care period.

4.1.4 SECTION 257.102(d)(1)(iv)

[Minimize the need for further maintenance of the CCR unit.]

The facility will be vegetated to prevent erosion. Maintenance of the final cover system will include mowing.

4.1.5 SECTION 257.102(d)(1)(v)

[Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.]

The CCR unit will be closed in a timeframe consistent with recognized and generally accepted good engineering practices. As the fill reaches the approved final grades, periodic closure activities may occur.

4.2 DRAINING AND STABILIZING OF THE SURFACE IMPOUNDMENT 257.102(d)(2)

This section is not applicable to a landfill.

4.3 FINAL COVER SYSTEM 257.102 (d)(3)

[If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.

The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan.]

The Indiana Department of Environmental Management (IDEM) was August 2022 to approve a modification of the final cover system to be compliant with the 40CFR257.102(d)(3). The approved final cover for the 133 acres of the active area of the landfill consists of the following from bottom up:

- (1) A minimum 6-inch thick prepared subbase of ash, or cover soil material;
- (2) 50-mil thick high-density polyethylene (HDPE) integrated drainage system (IDS) geomembrane;
- (3) A minimum 8-ounce per square yard non-woven geotextile;
- (4) A minimum 30-inch thick final cover soil (ML, CL, CH, CL-ML, SC, and SM from onsite borrow areas) over the IDS geomembrane and geotextile;
- (5) A minimum 6-inch thick layer of topsoil;
- (6) Vegetation.

5.0 ESTIMATE OF MAXIMUM CCR VOLUME 257.102 (b)(1)(iv)

[An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.]

The maximum CCR volume permitted for this facility is 13.7 million cubic yards.

6.0 ESTIMATE OF LARGEST AREA OF CCR REQUIRING COVER 257.102 (b)(1)(v)

[An estimate of the largest area of CCR unit ever requiring a final cover

The largest area of the CCR unit ever requiring a final cover is the current developed and not closed area of 133 acres. Temporary or intermediate cover is over all areas not actively receiving waste.

7.0 CLOSURE SCHEDULE 257.102(b)(1)(vi)

[A schedule for completing all activities necessary to satisfy the closure criteria in the section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of the CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of the CCR unit closure.

The Rockport plant is anticipated to close prior to using all the available disposal capacity at the landfill. As such final closure construction design documents will be prepared to support applications for any required local, state and federal permits to align with the anticipated final configuration of the landfill. Closure construction design documents will include construction drawings, technical specifications and quality assurance testing work plans.

The final closure activities will align with the disposal needs of the East Bottom Ash Pond Closure and any other approved materials from closure of the plant. Estimated time frames of anticipated closure activities are listed below:

Activity	Timeframe
Update Permitting and construction documents	Prior to last receipt of waste
Initiate Closure Activities	Within 30-days of last receipt of waste
Grading and Preparation of liner subgrade	10-20 days
Install Final cover system	100-120 days
Seed and Mulch	5-10 days
Installation of remaining erosion and sediment control structures	10-30 days
Anticipated Completion of Closure	4Q 2030

Record of Plan Revisions		
Revision Number	Date	Revision Description
0	October 2016	Original Document
1	December 2023	Revised Document announced Plant Closure date and Limited Landfill Area