

CLOSURE PLAN

CFR 257.102(b)

CCR Landfill

Rockport Plant
Spencer County, Indiana

October, 2016

Prepared for: Indiana Michigan Power Company– Rockport Plant

2791 North US 231

Rockport, Indiana 47635

Prepared by: American Electric Power Service Corporation

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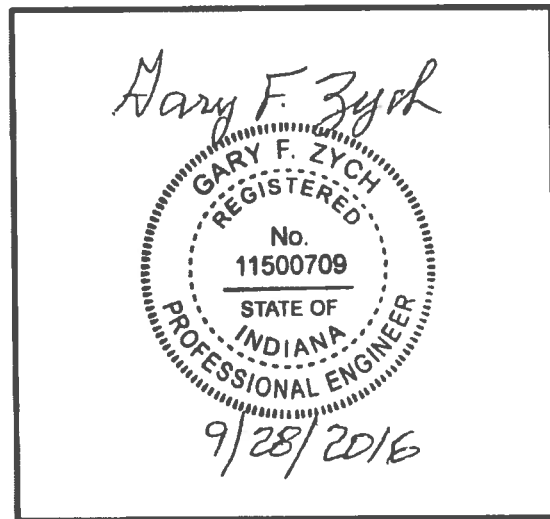
Document Id: GERS-16-076

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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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Attachment A

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 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 is 178 acres that is permitted to receive type 1 coal combustion residual wastes for a capacity of 13.6 million cubic yards of storage. Area 1B will be re-permitted at a later date and will be dependent upon the characteristics of the CCR waste at the time of permitting.

Approximately 54 acres of the total acreage has been closed and capped with a low permeable cohesive soil.

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. The closure activities are further discussed in the Closure Plan in Attachment A. This Plan in Attachment A contains all of the pertinent information and requirements of Section 257.102 (b).

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 final cover system per the current approved permit and closure plan calls for the final cover system to consist of a re-compacted soil barrier layer and protective soil cover. AEP will be submitting an

alteration to Indiana DEQ to incorporate a flexible geomembrane liner into the final cover system in compliance with the CFR 257.102(d)(3).

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 23.7 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 at any time is 100 acres.

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.]

At this time, the facility will close upon retirement of the power plant. Once the CCR unit requires closure a schedule to satisfy this section will be prepared and the Plan amended.

Attachment A

INDIANA MICHIGAN POWER COMPANY
ROCKPORT PLANT
RESTRICTED WASTE LANDFILL
CLOSURE PLAN

I. GENERAL INFORMATION

- A. Facility Name : Indiana Michigan Power Company
Rockport Plant Restricted Waste Landfill
- B. Facility Location: 2791 N. U.S. Highway 231, Rockport, Indiana, 47635
- C. Facility County: Spencer County
- D. Facility Solid Waste Permit No.: FP 74-02
- E. Total Permitted Fill Acreage: 554 acres

II. CLOSURE ACTIVITIES (Provide a description of the steps that will be used to partially close, if applicable, and finally close the facility.)

Of the 554 acres permitted for disposal, about 54 acres have been capped and closed, leaving about 500 acres available. The landfill is constructed in cells as disposal capacity is needed. When the outer slopes of each cell reach final grade that area is capped and closed. Logically, the closure costs should be based on the costs at the point in the facility's operating life where the extent and manner of its operation would make the final closure the most expensive. It is not envisioned that there will ever be more than 100 acres open so the closure plan should be based on closing 100 acres. However, this closure plan is based on closing the entire remaining 500 acres. As such, the actual final closure costs are greatly overstated.

Closure will follow all applicable regulations listed in 329 IAC 10-30.

The work associated with the closure of the landfill facility includes placement of waste to approved final grades. Once final grades are reached, placement of clay soil is undertaken. Two feet of clay soil is placed over all Type II restricted waste area final slopes, four feet over all Type I areas that have final slopes greater than 25%, and two feet over Type I final slopes that are less than 15% (note: there are no Type I final slopes between 15% and 25%). After the clay soils are placed, six inches of topsoil are placed over all areas and they are then seeded to establish a vegetative cover.

Additional items that will be performed as part of the closure process are as follows:

- o Notification to IDEM at least 60 days prior to closing any portion of the landfill that has reached final grades.
- o Compaction of cover soils and establishment of vegetation will be performed as per IDEM regulations and the AEPSC Civil Engineering Division Technical Specifications.

