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SUBMITTED ELECTRONICALLY

February 2, 2016

Indiana Department of Environmental Management
Mr. Jeff Sewell, Branch Chief
Office of Land Quality, Permits Branch
IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204-2251

RE: Notification of State Director of an Entry to the Operating Record of
Merom Generating Station FP 77-04
Annual Professional Engineer Visual Site Inspection Report 2016

Dear Mr. Sewell:

Pursuant to 40 CFR 257.106(g)(7), please find attached the Report for the Annual Inspection by a Qualified Professional Engineer for Hoosier Energy REC's Merom Generating Station existing landfill permitted by IDEM as RWS Type I FP 77-04. The inspection was completed on January 11, 2016.

No review or approval of this report is being requested from the Department at this time. If you have any questions or need any further information, please contact me at your convenience. My office number is (812) 935-4720.

Sincerely,

Lon M. Petts
Environmental Team Leader

Enclosure

Cc: Central File
M. 1.48.106 (without enclosure)



VISUAL SITE INSPECTION REPORT - 2016

**HOOSIER ENERGY REC
MEROM GENERATING STATION
AREA 3 RESTRICTED WASTE LANDFILL
MEROM, IN**

ATC PROJECT NO. 170LF00AST

JANUARY 15, 2016

PREPARED FOR:

**HOOSIER ENERGY REC
MEROM GENERATING STATION
5500 WEST OLD HIGHWAY 54
SULLIVAN, IN 47882
ATTENTION: MR. DON CHESTNUT**



January 15, 2016

Don Chestnut
Hoosier Energy REC
Merom Generating Station
5500 West Old Highway 54
Sullivan, IN 47882

ATC Group Services LLC

7988 Centerpoint Dr.
Suite 100
Indianapolis, IN 46256

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Subject: Visual Site Inspection Report – 2016
Merom Generating Station
Area 3 Type I Restricted Waste Landfill
Merom, Indiana
ATC Project No. 170LF00AST

Dear Mr. Chestnut:

Submitted herewith is the report of our 2016 Visual Site Inspection of the Area 3 Type I Restricted Waste Landfill at the Merom Generating Station. This visual inspection and report were done in accordance with guidelines established by the Coal Combustion Residuals (CCR) Rule published by the Environmental Protection Agency on April 17, 2015.

The scope of this inspection was limited to an examination of readily observable surficial features of the landfill and its appurtenant structures, and a review of available site information. Please note that the inspection did not include any test drilling, testing of materials, precise physical measurements of landfill features, detailed calculations to verify slope stability or other engineering analyses. Although the inspection was conducted by competent personnel in accordance with generally accepted methods for inspecting landfills, it should not be considered as a warranty or guaranty of the future performance/safety of the landfill.

The Merom Area 3 Landfill is located in Sullivan County, Indiana in Section 2 of Gill Township and within Township-7-North/Range-10-West. The landfill is located about 1.1 mile east of Turtle Creek and about 4.2 miles east of the Wabash River as shown on Figure 1 in Appendix A.

The landfill inspection was completed on January 11, 2016 by David Stelzer and Kilian Sweet of ATC Group Services LLC (ATC). The weather conditions during the inspection was approximately 20° F and partly cloudy.

Coal Combustion Residuals Rule Landfill Requirements/Observations

This visual inspection was performed to address the standards and guidelines required by the CCR Rule instituted by the Environmental Protection Agency on April 17, 2015. As a result,

CCR Landfills are now required to meet the requirements of 40 C.F.R. §257 to conduct annual inspections of the landfill in accordance with 40 C.F.R. §257.84(b). Listed below are requirements specified within the CCR Rule and the observations made by David Stelzer and Kilian Sweet during the initial annual inspection:

40 C.F.R. §257.84

(b) Annual inspections by a qualified professional engineer.

(1) Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., the results of inspections by a qualified person, and results of previous annual inspections); and

The initial inspection of the Merom Area 3 Landfill was conducted by the undersigned professional engineer on January 11, 2016. Prior to the inspection, design plans were reviewed by the undersigned.

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

The inspection conducted on January 11, 2016 did not reveal any immediate signs of failure for the landfill. However, as noted below in the landfill observations and recommendations, there are areas of that require repair and/or modification as part of the ongoing maintenance of the landfill area.

(2) Inspection report. The qualified professional engineer must prepare a report following each inspection that addresses the following:

(i) Any changes in geometry of the structure since the previous annual inspection;

This is the first annual inspection of the Area 3 Type I Restricted Waste Landfill at the Merom Generating Station. At this time, only the northernmost cell, Cell 1, has been constructed along with associated portions of the stormwater and sedimentation control system.

(ii) The approximate volume of CCR at the time of the inspection;

The approximate volume of CCR in the landfill is about 900,000 cubic yards.

(iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and

There were no signs of structural weakness noted within the permitted solid waste boundary at the time of this visual inspection. However, erosion gullies within the soil (only) of the soil cover were noted on the south, east, north and west slopes of Cell 1, along the east side of the haul road to the south of Cell 1, and along the east side of the Sedimentation Basin; wind erosion of the soil stockpiles was noted along the southeast and east side of Cell 1; and ditch

erosion of soil outside the landfill solid waste limits was noted near the northwest corner of the landfill. These areas need to be covered with soil and regraded when weather allows.

Ponded water was noted in a ditch outside the solid waste boundary along the east side of Cell 1. This area needs to be excavated and regraded to drain this ponded water to the north and then west around the northeast corner of the Cell 1.

(iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

None noted at the time of this inspection.

Coal Combustion Residuals Landfill Observations/Recommendations

This section of report provides additional details regarding the landfill inspection completed on January 11, 2016. The locations of features discussed in the following sections and the landfill system features are highlighted on Figure 2 in Appendix A.

The landfill system was divided into the following components to help organize the inspection and the reporting:

- South side of Cell 1,
- East side of Cell 1,
- North side of Cell 1,
- West side of Cell 1,
- Cell 1 top area, and
- Area 3 Sedimentation Pond.

The following paragraphs include a summary of the observations made during the inspection followed by our recommendations in bold print. Note that no final cover has been placed on Cell 1, no partial closure has taken place, and a soil cover has been placed on outside slopes around Cell 1. The erosion described does not occur within the in-place waste and occurs within in the soil cover, on the surface of soil berms, and in drainage ditches outside the solid waste boundary.

South Side of Cell 1 – Observations /Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Locations 520, 524, 528, 529, 530, 531, 532, and 533 encountered soil slopes that are lightly vegetated with some erosion due to surface water runoff. Location 524 encountered a small area of exposed geosynthetic liner material.
Recommendation: Regrade and overseed the areas where erosion rills are present.
- 2) Locations 528, 530, 531, 532, and 533 encountered areas where wind has eroded and carried soil away from the soil stockpile that is located along the eastern portion of this area.

Recommendation: Flatten the soil stockpiles sideslopes to remove peaks and sharp ridges that are the most prone to wind erosion and follow the site dust control plan guidelines.

East Side of Cell 1 – Observations /Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Locations 536, 537, 538, 543, 556, 557, and 571 encountered soil slopes that are lightly vegetated with some erosion rills due to surface water runoff.
Recommendation: Regrade and overseed the areas where erosion rills are present.
- 2) Locations 536, 537, 552, 553, 554, 556, 557 and 567 encountered areas where wind had eroded and carried soil away from the soil stockpile that is located along the northern portion of this area.
Recommendation: Flatten the soil stockpiles sideslopes to remove peaks and sharp ridges that are the most prone to wind erosion and follow the site dust control plan guidelines.
- 3) Locations 554, 559, and 560 encountered areas where water has ponded in the drainage ditch located just outside the perimeter fence of this area. This standing water appears to be caused by the construction of a security gate and fencing at the southeast corner of Cell 1.
Recommendation: The drainage ditch should be regraded and revegetated to prevent the ponding of surface water.
- 4) Location 548 encountered slopes surrounding a monitoring well that are experiencing some erosion.
Recommendation: Regrade and overseed the areas where erosion rills are present.

North Side of Cell 1 – Observations /Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Location 583 encountered soil slopes that are lightly vegetated and have some erosion rills due to surface water runoff.
Recommendation: Regrade and overseed the areas where erosion rills are present.
- 2) Locations 576 and 579 encountered areas where wind has eroded soil and carried soil away from the soil stockpile that is located along the northern portion of this area.
Recommendation: Flatten the soil stockpiles sideslopes to remove peaks and sharp ridges that are the most prone to wind erosion and follow the site dust control plan guidelines.
- 3) Locations 592 and 597 encountered an area where water has deeply eroded a drainage ditch. This erosion appears to be caused by the construction of a temporary crossover culvert and the lack of sufficient vegetation in this section of ditch.

Recommendation: This section of drainage ditch should be regraded, protected with an erosion control matting, and revegetated.

West Side of Cell 1 – Observations /Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Locations 517, 519, and 628 encountered soil slopes that are lightly vegetated and have some erosion rills due to surface water runoff.

Recommendation: Regrade and overseed the areas where erosion rills are present.

Top Cell 1 – Observations /Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Locations 599, 600, and 601 encountered some areas where Pozotec could be eroded by wind.

Recommendation: Flatten the soil stockpiles sideslopes to remove peaks and sharp ridges that are the most prone to wind erosion and follow the site dust control plan guidelines.

Area 3 Sedimentation Basin - Observations/Recommendations

Items noted during the visual inspection of this area are described in the following list.

- 1) Locations 610 and 619 encountered areas of erosion channels just outside the top edge of the riprap cover of the sedimentation basin.

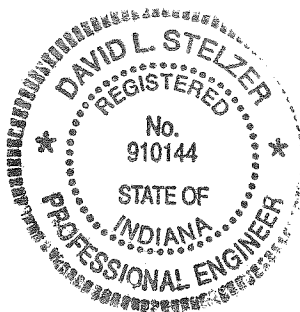
Recommendation: Repair and vegetate the erosion features as part of the ongoing maintenance of the landfill area.

We appreciate the opportunity to assist you with this project. If you have any questions concerning information contained in the report, or if the condition of the dam should change significantly from that described herein, please do not hesitate to call either of the undersigned at 317.849.4990.

Sincerely,
ATC Group Services, LLC



Kilian S. Sweet, E.I.T.
Staff Engineer



David L. Stelzer, Ph.D., P.E.
Senior Project Engineer

Copies: (3) Don Chestnut – Hoosier Energy

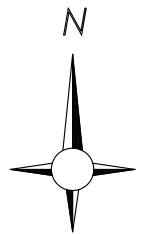
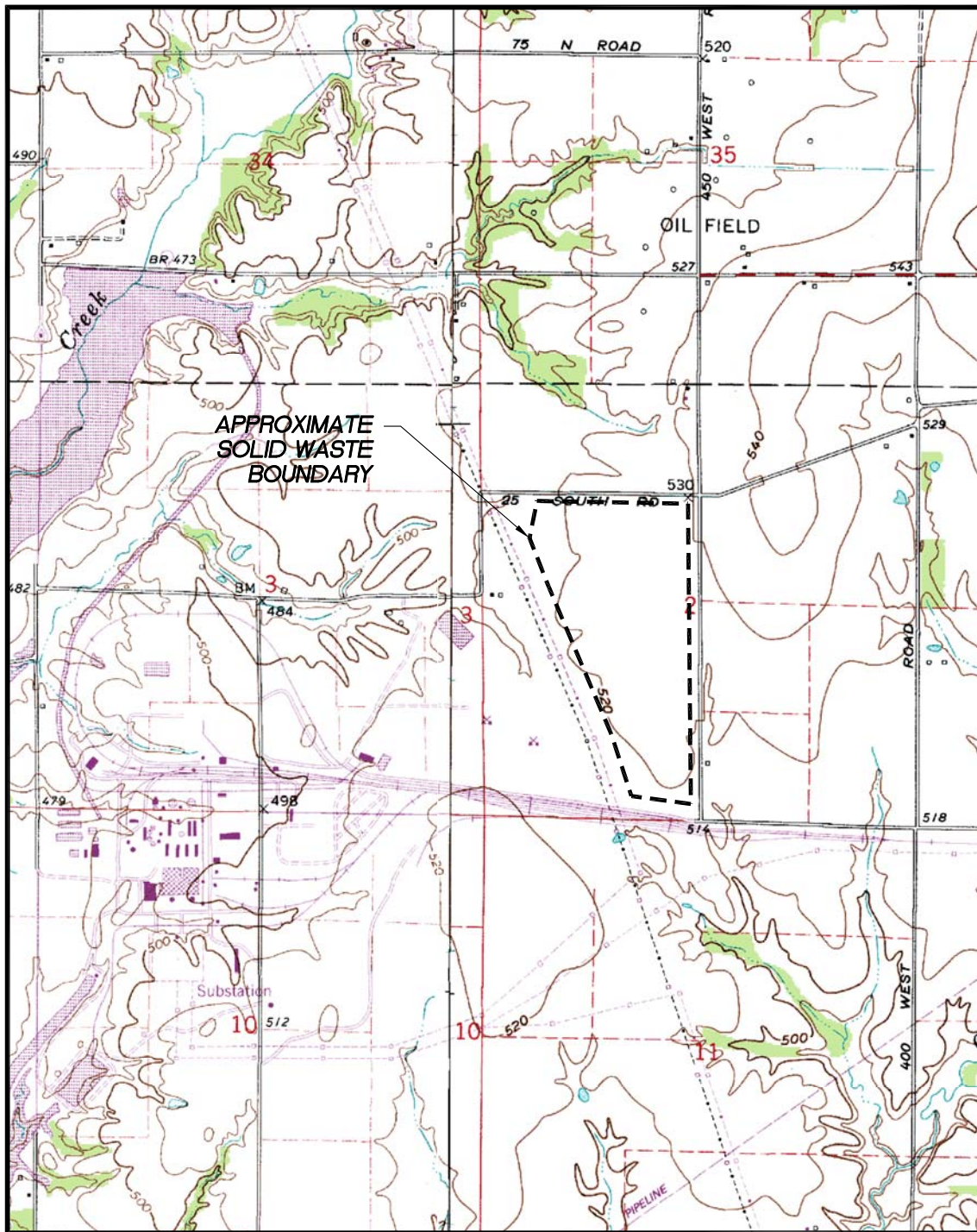
APPENDICES

APPENDIX A: FIGURES

APPENDIX A

FIGURE 1 – VICINITY MAP

FIGURE 2 – LOCATIONS OF LANDFILL OBSERVATIONS



VICINITY MAP

VICINITY MAP
AREA 3 RESTRICTED WASTE LANDFILL
MEROM GENERATING STATION

Project Number:
170LF00138

Drawing File:
SEE LOWER LEFT

Date:
1/16

Scale:
1" = 2000'

ATC

Drn. By:
SP

Ckd. By:
DS

App'd By:
DS

Figure:

1

