



VISUAL SITE INSPECTION REPORT – 2024

SOUTHERN INDIANA GAS AND ELECTRIC
A.B. BROWN GENERATING STATION
TYPE III RESTRICTED WASTE LANDFILL
WEST FRANKLIN, IN

ATLAS PROJECT NO. 170LF01692

JANUARY 2, 2025

PREPARED FOR:

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY
dba CENTERPOINT ENERGY INDIANA SOUTH
A.B. BROWN GENERATING STATION
8511 WELBORN ROAD
MOUNT VERNON, IN 47620
ATTENTION: MR. GREGORY DICK



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January 2, 2025

Mr. Gregory Dick
CenterPoint Energy
8511 Welborn Road
Mount Vernon, IN 47620

Re: Visual Site Inspection Report – 2024

A.B. Brown Generating Station
Type III Restricted Waste Landfill
West Franklin, Indiana
Atlas Project No. 170LF01692

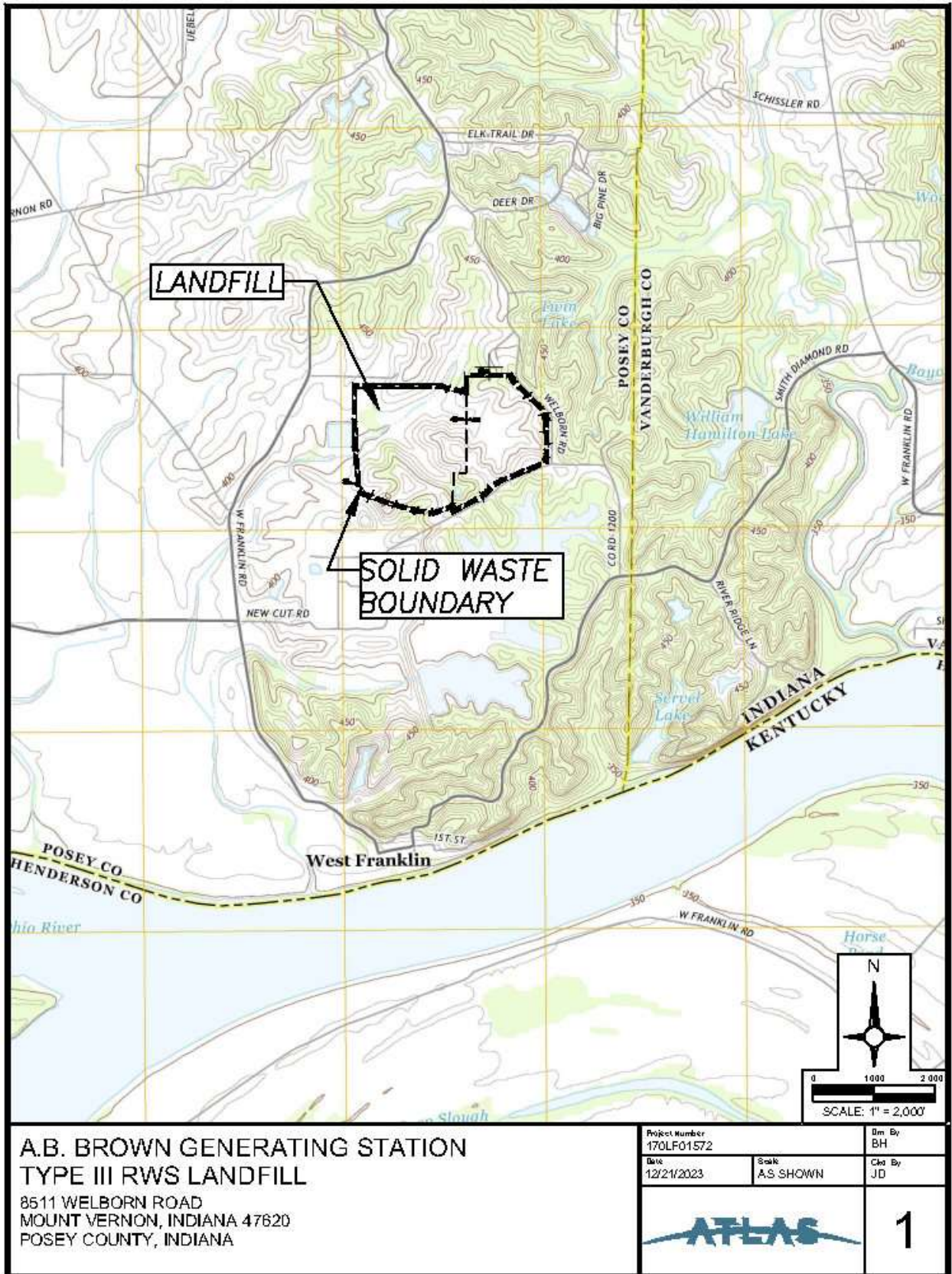
Dear Mr. Dick:

This report summarizes our October 29, 2024 Visual Site Inspection of the Type III Restricted Waste Landfill at the A.B. Brown Generating Station. Atlas Technical Consultants (Atlas) completed the visual inspection and this report in accordance with guidelines established by the Coal Combustion Residuals (CCR) Rule published by the Environmental Protection Agency (EPA) on April 17, 2015.

This inspection included a visual examination of readily observable surface features of the landfill and its appurtenant structures, and a review of information provided by CenterPoint Energy. Please note that the inspection did not include any drilling, testing of materials, precise physical measurements of landfill features, detailed calculations, 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 guarantee of the future performance and/or safety of the landfill.

The landfill is located within the A.B. Brown Station property in Section 24, Township 7 South, and Range 12 West, about a half mile north of the Ohio River in Posey County, Indiana as highlighted on the West Franklin, IN USGS Quadrangle map, Figure 1 on the following page.

Asma Rony and Juan Carrizo of Atlas completed the landfill inspection, with site support by Lindsey Gish of CenterPoint Energy. The weather during the inspection was sunny with temperatures ranging from 54°F to 68°F. Ground conditions were generally dry. The landfill system features are highlighted on the attached Site Plan in Appendix A.



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

- Partial Closure Areas (east end, north slope, and south slope of the landfill).
- Interim Cover Area (west end of the landfill).
- Vertical Expansion Area (top central portion of the landfill); and
- Landfill Settling Basin.

The approximate limits of each of these areas is noted on Sheet 1 in Appendix A.

The following paragraphs include a summary of the observations made during the inspection followed by our recommendations in bold print. Approximate locations of some of the observed features are noted on Sheet 1 in Appendix A.

PARTIAL CLOSURE AREAS – OBSERVATIONS / RECOMMENDATIONS

The approximate limits of the Partial Closure Area – Composite Final Cover are shown on Sheet 1 in Appendix A and cover an area of approximately 28 acres. The composite cover consists of a 40-mil LLDPE geomembrane overlain with a 16 oz/yd² nonwoven geotextile, 2.5 feet of protective soil, and 0.5 feet of topsoil. The final cover was constructed in stages from 2012 through 2014. Documentation of the completion of closure activities in this area was submitted to the Indiana Department of Environmental Management (IDEM) in three (3) separate reports in 2012, 2013, and 2014.

The approximate limits of the Partial Closure Area – Soil Final Cover are also shown on Sheet 1 in Appendix A. This section covers an area of approximately 24.5 acres and consists of a minimum of 2.0 feet of cohesive soils, covered with 0.5 feet of topsoil. Documentation of the completion of the closure activities along these slopes was submitted to IDEM in 2015.

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

- 1) In general, this area is well vegetated and well maintained (Locations 1, 3, 4, 7, 11, 12, 13, 17, 24, 25, and 26).

Recommendation: No issues observed.

- 2) Observed sparse vegetation of the Final Cover (Locations 5).

Recommendation: Areas of sparse vegetation should be reseeded with similar grasses to the ones at the site, and temporarily isolated to prevent trampling and help re-establish grass cover.

- 3) Minor debris accumulated around pipe structure and riprap (Location 2).

Recommendation: Remove debris.

- 4) Animal burrow observed on the east side of the landfill (Location 6).

Recommendation: Repair hole/cavity and seed accordingly.

- 5) Tall vegetation growth was observed along the edge, on side slopes, and within some drainage channels on the north side of the landfill and near an outlet drainage pipe, on the northeast side of the landfill (Locations 14, 15, 16, and 18).

Recommendation: Continue regular maintenance activities.

VERTICAL EXPANSION AREA OBSERVATIONS / RECOMMENDATIONS

The vertical expansion area noted on Sheet 1 in Appendix A generally consists of approximately 18 acres across the top of the central portion of the landfill. Items noted during the visual inspection of this area are described in the following list.

- 1) In general, this area has temporary or final cover with established vegetation while parts are receiving soil cover (Location 10).

Recommendation: No issues observed.

- 2) Erosion, sparse vegetation has observed on the middle north and south slope of the Vertical Expansion Area (Locations 8 and 9).

Recommendation: Follow erosion control BMPs, repair, and reseed areas to re-establish grass cover.

- 3) Active soil cover placement on south side slope. (Location 23).

Recommendation: seed area once work is completed and monitor surface water runoff for sediment erosion/deposition after significant storm events.

INTERIM COVER AREA OBSERVATIONS / RECOMMENDATIONS

The Interim Cover area generally consists of portions of Cells 16, 17 and 18, which occupy an area of approximately 21 acres. Items noted during the visual inspection of this area are described in the following list.

- 1) Active filling with production filter cake has ceased with the shutdown of the coal combustion generating plant. A permit modification has been approved for placement of material from the ash pond that does not meet beneficial use specifications, pending IDEM approval of the waste characterization.

Recommendation: None at this time.

- 2) Surface water runoff from the northern portion of the area is routed to a depression at the far north end and southwest corner.

Recommendation: Monitor these areas during and after significant storm events to maintain adequate freeboard.

- 3) Active soil cover placement on south side slope. (Location 22).

Recommendation: seed area once work is completed and monitor surface water runoff for sediment erosion/deposition after significant storm events.

LANDFILL SETTLING BASIN OBSERVATIONS / RECOMMENDATIONS

The existing Landfill Settling Basin was constructed in 2015 to receive water that has been in contact with waste in the landfill. The pond has a composite liner across the base and a riprap protective layer. The inlet pipe is located in the southeast corner of the pond while the drop inlet for the outlet to the Capital Pond is in the northwest corner of the pond. A stormwater detention basin is located immediately north of the Capitol Pond. Items noted during the visual inspection of this area are described in the following list.

- 1) The slopes of the Settling Basin are lined with riprap and appeared in satisfactory condition. Also, the pond is maintaining adequate freeboard (Locations 27).

COAL COMBUSTION RESIDUALS RULE LANDFILL REQUIREMENTS/OBSERVATIONS

In addition to the general observations and recommendations outlined above, this visual inspection was also performed to address the standards and guidelines required by the CCR Rule established by the EPA 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). The requirements specified within the CCR Rule, and the observations made by Atlas during the 2024 annual inspection are listed below:

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 annual inspection of the AB Brown Landfill was conducted by the undersigned professional engineers on October 29, 2024. Operating records along with 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 October 29, 2024 did not reveal any signs of imminent failure for the landfill. However, there are isolated areas of erosion 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;

In general, the following changes in the geometry of the structure were noted during the 2024 visual inspection:

- **Soil cover is being placed on the center, western and southern portions of the Interim Cover Area.**
- **Maintenance issues noted during the 2023 visual inspection had been addressed.**

The measures taken as outlined above have improved the overall condition of this facility.

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

The approximate volume of CCR within the limits of the 1988 landfill expansion is 5,510,074 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. Additional temporary erosion and sediment controls should be deployed in the Vertical Expansion Area.

(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.

We appreciate the opportunity to assist you with this project. If you have any questions concerning information contained in this report, please do not hesitate to call either of the undersigned at 317.849.4990.

Sincerely,

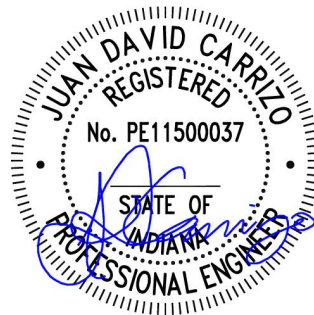
Atlas Technical Consultants L.L.C.



Asma A. Rony, Ph.D.
Staff Engineer



Juan D. Carrizo, P.E.
Senior Project Engineer



1/02/2025

Copies: Lindsey Gish – CenterPoint Energy
Gregory Dick – CenterPoint Energy
Jason Copeland – CenterPoint Energy

Appendices

Appendix A: Site Plan

Appendix A: Site Plan

