

# **2015 ANNUAL ENGINEERING INSPECTION REPORT**

## **ENTERGY WHITE BLUFF PLANT CLASS 3N LANDFILL**

**PERMIT NO. 0199-S3N-R3  
AFIN: 35-00110**

**JANUARY 15, 2016**

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CLASS 3N LANDFILL  
2015 ANNUAL ENGINEERING INSPECTION REPORT

PERMIT NO. 0199-S3N-R3  
AFIN: 35-00110

Prepared for

Entergy White Bluff Plant  
1100 White Bluff Road  
Redfield, AR 772132

Prepared by

FTN Associates, Ltd.  
3 Innwood Circle, Suite 220  
Little Rock, AR 72211

FTN No. R06040-0991-001

January 15, 2016

## PROFESSIONAL ENGINEER'S CERTIFICATION

This report on the annual engineering inspection of the Entergy White Bluff Plant Class 3N Landfill and supporting documentation was prepared under the direction and supervision of a qualified, State of Arkansas-registered Professional Engineer. Mr. Jason Ghidotti, PE, of FTN Associates, Ltd. (FTN), was responsible for the overall preparation of this report. The report has been prepared to fulfill the requirements of §257.84(b). Based on the inspection of the landfill facility and review of available landfill documents the design, construction, operation, and maintenance of the landfill is generally consistent with recognized and generally accepted good engineering standards.



Jason Ghidotti, PE, Arkansas License No. 10031

01-15-2016

Date

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## **1.0 INTRODUCTION**

### **1.1 Purpose of Report**

The purpose of this report is to document the annual inspection of the Entergy White Bluff Landfill facility in accordance with 40 CFR §257, *Subpart D - Disposal of Coal Combustion Residuals From Electric Utilities* (the CCR Rule). In particular, the report has been prepared to comply with §257.84(b), which requires an inspection to be conducted by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the landfill is consistent with recognized and generally accepted good engineering standards.

The report includes the following:

- Information on the current layout of the landfill,
- Waste volume estimates for the amount of waste contained in the landfill and remaining disposal capacity, and
- An assessment of the landfill including structural integrity and overall operations with respect to the CCR Rule and the facility permit requirements.

### **1.2 White Bluff Power Plant Information**

The Plant is located on the west bank of the Arkansas River, near Redfield in Jefferson County, Arkansas, as shown on Figure 1 (all figures are located in Appendix A). The 3,400-acre site is situated on a bluff overlooking the relatively flat alluvial plain east of the Arkansas River.

The Plant generates electricity through the combustion of coal and has been in operation since 1981. Coal combustion by-products (residues) (CCRs) that are generated during the electrical generation process are disposed in the onsite landfill. The ash is generally segregated into two categories, “fly” and “bottom.”

Approximately 80% of the ash produced is classified as fly ash, which is derived from the boiler exhaust gas and is collected in electrostatic precipitators. The fly ash is composed of very fine particles similar to glass and has the consistency of a powder. Collected fly ash is pneumatically transferred to silos for short-term storage. A subcategory of the fly ash is known as economizer ash. This material is the coarsest fraction of the fly ash, which drops out before

the electrostatic precipitators, and represents approximately 2% of the total ash production. The Plant collects this material in a separate silo system.

The remaining 18% of coal ash produced from the combustion of coal is comprised of bottom ash, which is composed of angular, glassy particles with a porous surface texture and has the consistency of coarse sand. The bottom ash is sluiced to dewatering hoppers for removal of water and for storage.

Historically, approximately 60 to 70 % of the two types of ash have been marketed regionally to construction-related industries. The remaining amount of ash is placed in the onsite landfill for disposal. The amount placed in the Landfill varies from year to year, but the average for the past 5 years is approximately 100,000 cubic yards (cy).

### **1.3 Permit History**

The Landfill was initially issued a permit in 1982 by the Arkansas Department of Pollution Control and Ecology (now the Arkansas Department of Environmental Quality [ADEQ]) and has received three permit modifications to date. The facility permit history is as follows:

1. In October 1982, Chem-Ash, Inc. (Chem-Ash), the onsite landfill contractor which managed coal ash sales and landfill disposal operations for Arkansas Power & Light (AP&L), was granted a permit (No. 199-S) from the Arkansas Department of Environmental Quality ((ADEQ) to construct and operate a solid waste disposal facility at the White Bluff Plant (Entergy Arkansas, Inc. became AP&L's successor in interest as of April 1996).
2. In March 1983, ADEQ granted, among other provisions, a permit modification request to transfer the landfill permit from Chem-Ash to AP&L and revised the permit number to 199-SR-1.
3. In June 1984, AP&L submitted an application for permit modification requesting operational changes and other provisions to include an increase of the permitted landfill area from 110 acres to 177 acres, with 153 acres for waste disposal. ADEQ granted the permit modification request in September 1985. The permit number was revised to 199-SR-2.

4. Entergy Arkansas submitted a permit modification application to the ADEQ-SWMD to upgrade the Landfill to Arkansas Regulation No. 22 (Regulation No. 22) standards in December 1997. The ADEQ issued the permit November 2000.
5. Entergy Arkansas submitted a minor permit modification in April 2011 and the ADEQ approved the request in May 2011 to reconfigure the waste disposal areas into five disposal cells, which is the current landfill configuration.

## 2.0 LANDFILL LAYOUT

### 2.1 Existing Conditions of Landfill

The permitted landfill area consists of approximately 177 acres (153 acres for solid waste disposal) and is located in the southwestern portion of the plant site as shown on Figure 2.

The current layout of the Landfill includes a total of 5 disposal cells and has a permitted waste capacity of approximately 4,688,200 cubic yards (cy). Waste Cells 1 through 3 have been constructed and comprise the active disposal area of the Landfill that received CCR materials after October 19, 2015. Waste Cell 4 is under construction and is expected to be completed in January 2016.

Construction of the disposal cells has followed the numerical sequence of the cell numbers. Cells 1 through 3 are existing landfill CCR units and will be operated in accordance with requirements of the CCR Rule. Waste Cell 4 is being constructed in accordance with Regulation No. 22 Class 3N landfill standards (i.e., 2-ft thick compacted clay liner with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec and a leachate collection system). Construction on the cell began prior to October 19, 2015 and will be operated as an existing CCR landfill.

No final cover system has been installed on Waste Cells 1 through 3. As shown on Figure 2, older portions of the landfill facility that received CCR material prior to the issuance of the 2000 permit have been closed and covered in accordance with the original facility permit (1982). These areas did not receive CCR after October 2015.

Table 2.1 presents a summary of the disposal cells that have been constructed at the White Bluff Landfill.



Table 2.1. Construction Summary of White Bluff Plant Class 3N Landfill

Cell Number	Year Built	Year Closed	Final Cover System	Status
1	2005	N/A	N/A	Open
2	2007	N/A	N/A	Open
3	2010	N/A	N/A	Open
4	2015/2016	N/A	N/A	Under construction

## 2.2 Changes Made to Landfill Configuration During Reporting Period

The facility began construction of a new 6.5-acre waste cell, Cell 4, at the beginning of October 2015. As shown on Figure 2, Cell 4 is located south of Cell 3 and west of Cell 2. Utilization of the new cell will eventually allow waste to be placed at higher elevations in the adjacent cells, increasing the operational capacity of those cells.

Cell 4, currently under construction, was designed with a 24-inch thick compacted clay liner with  $1 \times 10^{-7}$  cm/sec maximum permeability and a leachate collection and transmission system. Additionally, new collection lines will be installed in the existing Cell 3, which does not currently have leachate collection. These new collection lines will be connected to the new Cell 4 leachate collection system, which has been designed to handle leachate from both cells.

The landfill manager that works for the contracted landfill management company, Headwaters Resources, Inc. (HRI), reported additional improvements during the year including repairs to slopes exhibiting rills and gullies, cleaning stormwater ditches, washing and collecting resulting material from paved roads and constructing barrier walls around the truck loading/silo area.

To prepare for the new CCR rule, HRI and Entergy Arkansas staff that are responsible for the landfill facility were trained on conducting weekly inspections, copies of which are included in Appendix A. The inspections began in October 2015 in accordance with the CCR Rule. It appears that the inspections were done by the same inspector from HRI during October, November and December. It is recommended that the inspector be alternated and inspections reviewed by all necessary personnel.

### **3.0 WASTE VOLUME CALCULATIONS**

The landfill facility has been surveyed annually since 1996. Each year's survey is compared to the previous year to compute the amount of CCR disposed. The current survey is also compared to the permitted top of waste elevations to determine remaining capacity, or airspace. Additionally, the current survey is compared to an estimated "operational" top of waste to determine the remaining operational capacity. The operational top of waste is the maximum disposal elevation that can be achieved within the open cells while maintaining the required 4:1 exterior and 3:1 interior slopes along with a top width sufficient for disposal activities. If additional operational capacity is needed, construction of an adjacent disposal cell will be required.

Disposal rates for the facility are calculated using the average of the disposal rates from the five most recent years. Disposal rates depend upon CCR production at the plant and sales of the ash. These can vary significantly year to year based upon the current economic climate, weather, and how much the plant is operational.

For the reporting year of 2015, the active disposal areas of the landfill were surveyed on March 14, 2015, and again on December 22, 2015, a period of nine months. A comparison of surface models developed from these surveys as well as the operational top of waste is summarized in Table 3.1, below. As opposed to previous years where the facility used around 100,000 cubic yards of airspace, the landfill had a net gain in airspace during 2015. Current disposal activities resulted in a net removal of approximately 11,100 cubic yards of ash from the active disposal area.

Table 3.1 Summary of waste volume calculations.

<b>Cell Number</b>	<b>Status</b>	<b>Area (ac)</b>	<b>ADEQ Permitted Waste Capacity (cy)</b>	<b>2015 Volume Placed* (cy)</b>	<b>Total Volume Placed (cy)</b>	<b>Operational Remaining Disposal Capacity (cy)</b>	<b>Operational Remaining Life (years)</b>
Cell 1	Active	6.0	307,500	-13,100	182,800	95,700	1.0
Cell 2	Active	9.0	712,100	13,300	386,500	59,300	0.6
Cell 3	Active	9.4	557,200	-11,300	269,700	147,500	1.5
<b>Totals</b>		<b>24.4</b>	<b>1,576,800</b>	<b>-11,100</b>	<b>839,000</b>	<b>302,500</b>	<b>3.1</b>

\* Volume cut or filled during the 9-month period between March and December 2015.

The 5-year average disposal rate, including 2015, is approximately 96,500 cubic yards per year, in-place. At this rate, the calculated available airspace, 302,000 cubic yards, provides less than 3 years of remaining operation capacity. Completion of Cell 4 will increase the available airspace to 1,120,000 cubic yards or approximately 11 years of remaining operation capacity.

## **4.0 ASSESSMENT OF LANDFILL FACILITY**

This section of the report provides a summary of the inspection of the White Bluff Landfill facility that was conducted on December 16, 2015. The assessment included an interview with the landfill operating company (HRI) personnel and Entergy personnel, review of weekly inspections of the facility, review of documents pertaining to the operation and compliance of the landfill, and an onsite inspection of the landfill facility. Copies of the Weekly Inspection Reports are included in Appendix B. Photographs of the site inspection are included in Appendix C.

### **4.1 General Operations**

The operator uses Cell 1 for production of a product named “flex-base”. CCR materials including bottom-ash and fly-ash are stockpiled, blended to make the “flex-base” and loaded to trucks in this area. Active disposal was conducted primarily in the Cell 2 and Cell 3 areas.

The side-slopes of the landfill are generally at the required 4:1 external and 3:1 interior slope requirements. The slopes in the larger Cells 2 and 3 are set back from the landfill perimeter berm. This allows stormwater runoff from the slopes to be collected and routed to the cell discharge points. Cell 3, as noted in Section 2.2, is currently being modified to discharge leachate to Cell, 4 which contains a leachate collection system.

The elevated disposal areas are surrounded by berms to reduce effects of wind, as described in Section 4.7 below. It appears that these berms have been raised as the level of ash in the active areas rises. This has created steeper slopes near the top of the side slopes of the landfill. These were noted to the landfill manager who will regrade the affected upper slopes as soon as they can be accessed without damaging the clay perimeter berm and liner system.

No tension cracks, seeps, or other features that indicate a potential slope failure were observed during the site inspection. In addition, no active seeps were noted.

The general operations of the landfill facility are being done in a safe manner and the overall maintenance of the facility is in good condition.

## **4.2 Landfill Cover System**

As noted, no final cover system has been installed on Waste Cells 1 through 3. However, as shown on Figure 2, older portions of the landfill facility that received CCR material prior to the issuance of the 2000 permit have been closed and covered in accordance with the original facility permit (1982). Figure 3 presents contours for the currently permitted final cover system.

All three active cells remain open. Interim cover soil has not been placed on any of the existing side slopes. The landfill manager plans to begin installation of interim cover on the north and east slopes of the landfill in the Spring of 2016. A large quantity of soil has been stockpiled near the landfill during previous construction projects for this purpose.

## **4.3 Leachate Collection System**

Waste Cells 1 through 3 do not have leachate collection systems. Cells 1 and 2 are graded to drain to the southeast corner of Cell 2 where leachate discharges to an adjacent stormwater channel, as required by the 2000 permit under which they were constructed. Similarly, Cell 3 drains to the southwest corner of the cell and discharges to an adjacent stormwater channel, as required by the 2000 permit.

Cell 4, currently under construction, was designed with leachate collection and transmission systems. Additionally, new collection lines are being installed along the west and south sides of the existing Cell 3, which does not currently have leachate collection. These new collection lines will be connected to the new Cell 4 leachate collection system, which has been designed to handle leachate from both cells. Once complete, an automated pumping system will remove the Cell 3 and Cell 4 leachate from a sump in the southwest corner of Cell 4. The leachate will be pumped via a dual-contained underground pipeline and discharged to the plant's Surge Pond.

Leachate from the landfill is currently discharged to stormwater channels that combine and discharge to the plant's Surge Pond. Water from the Surge Pond goes to the clay-lined Coagulation Sedimentation Ponds, thence to the Clear Water Pond. Overflows from the Clear Water Pond go the Arkansas River, as noted in Section 4.4, below.

#### **4.4 Stormwater Control System**

Stormwater at the landfill site flows south and then east to the plant Surge Pond. To prevent run-on, a lined stormwater channel was constructed along the north side of the landfill, routing stormwater east or west around the landfill. Additionally, clay perimeter berms prevent both run-on and run-off, except at designated discharge points as described in Section 4.3.

The White Bluff plant is permitted to discharge stormwater to the Arkansas River under NPDES Permit No. AR0036331, as issued by the ADEQ effective June 1, 2012. Ash disposal runoff is listed as a potential constituent of discharges from Outfall 002, overflow from the plant Clear Water Holding Pond. Discharges, when they occur, are monitored daily for total suspended solids (TSS), oil and grease (O&G), total iron, total copper and pH. Discharges, if they occur, are also monitored quarterly for E-coli and require acute WET testing.

#### **4.5 Facility Roads**

The facility roads were well maintained at the time of the inspection. The disposal access road to the active cells is paved, and it was in excellent condition at the time of the inspection. The perimeter access road has an all-weather surface course and was in good condition.

#### **4.6 Fugitive Dust Control**

The facility is operated as outlined by the CCR Fugitive Dust Control Plan, prepared in October 2015.

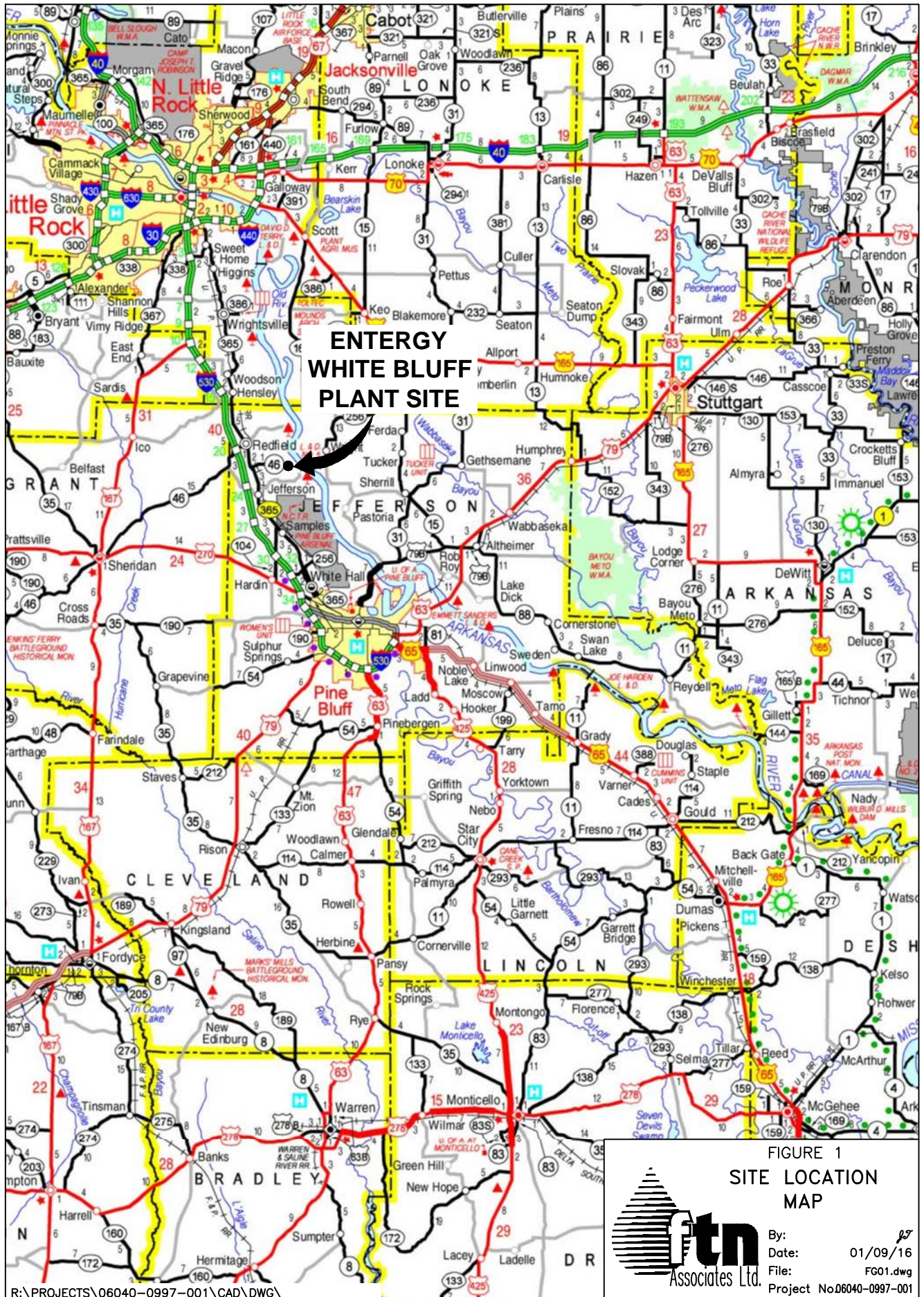
The landfill was not actively disposing of CCR during the December site visit. Fly ash is transported to the landfill and dumped using bottom-dump trailers to minimize fugitive dust issues. Bottom ash, in a moist condition, is hauled to the landfill using dump trucks. Economizer ash is loaded to covered dump truck prior to transfer to the landfill. A windsock is used to visually gauge wind direction and intensity. Water is applied, when necessary, for dust suppression on roads and the landfill using a water truck. The landfill access roads have enforced posted speed limit of 25 mph. Within the landfill boundary, a 5 mph speed limit is enforced.

# APPENDIX A

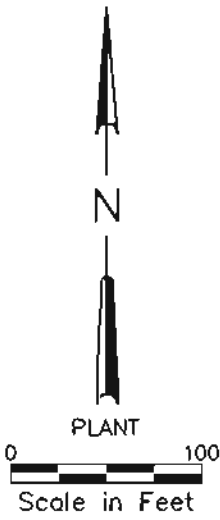
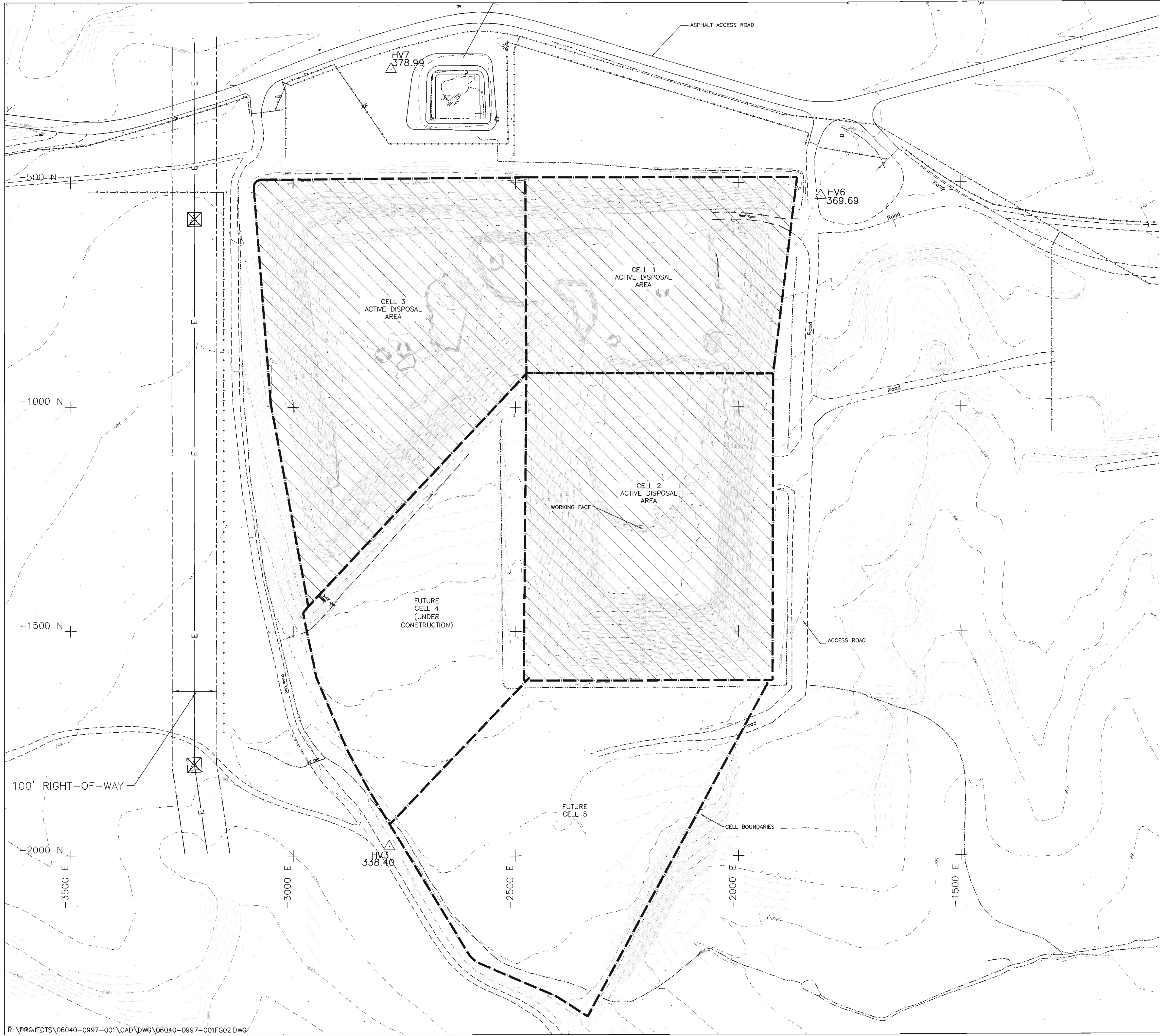
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Figures





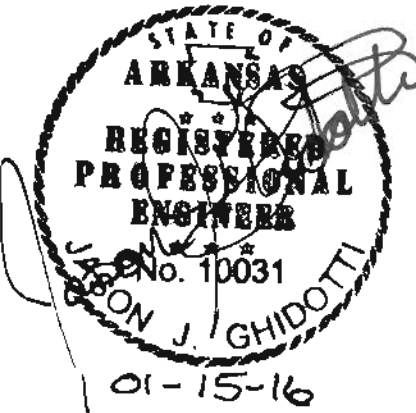




LEGEND

- EXISTING INDEX CONTOUR (10')
- EXISTING INTERMEDIATE CONTOUR (2')
- CELL BOUNDARIES (OLD PERMIT)
- CELL 1 FLY ASH CELL DESIGNATION
- CELL BOUNDARIES (EXISTING PERMIT)
- WATER LINE
- ELECTRIC TRANSMISSION LINE
- PAVED ROAD
- UNPAVED ROAD
- SURVEY CONTROL POINT
- OPEN LANDFILL AREA

NOTES:  
1. TOPOGRAPHIC INFORMATION WITHIN THE ACTIVE LANDFILL AREA (CELLS 1-3) IS FROM A FIELD SURVEY BY HARMON SURVEYING, INC. (DECEMBER 2015). ADDITIONAL SITE TOPOGRAPHIC INFORMATION IS FROM AN AERIAL SURVEY BY AMI ENGINEERING, INC. (NOVEMBER 2011) AND FIELD SURVEYS BY HARMON SURVEYING, INC. (FEBRUARY 2012 AND MARCH 2015).

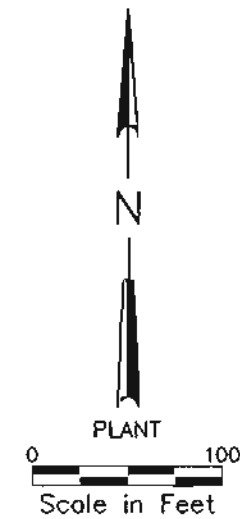
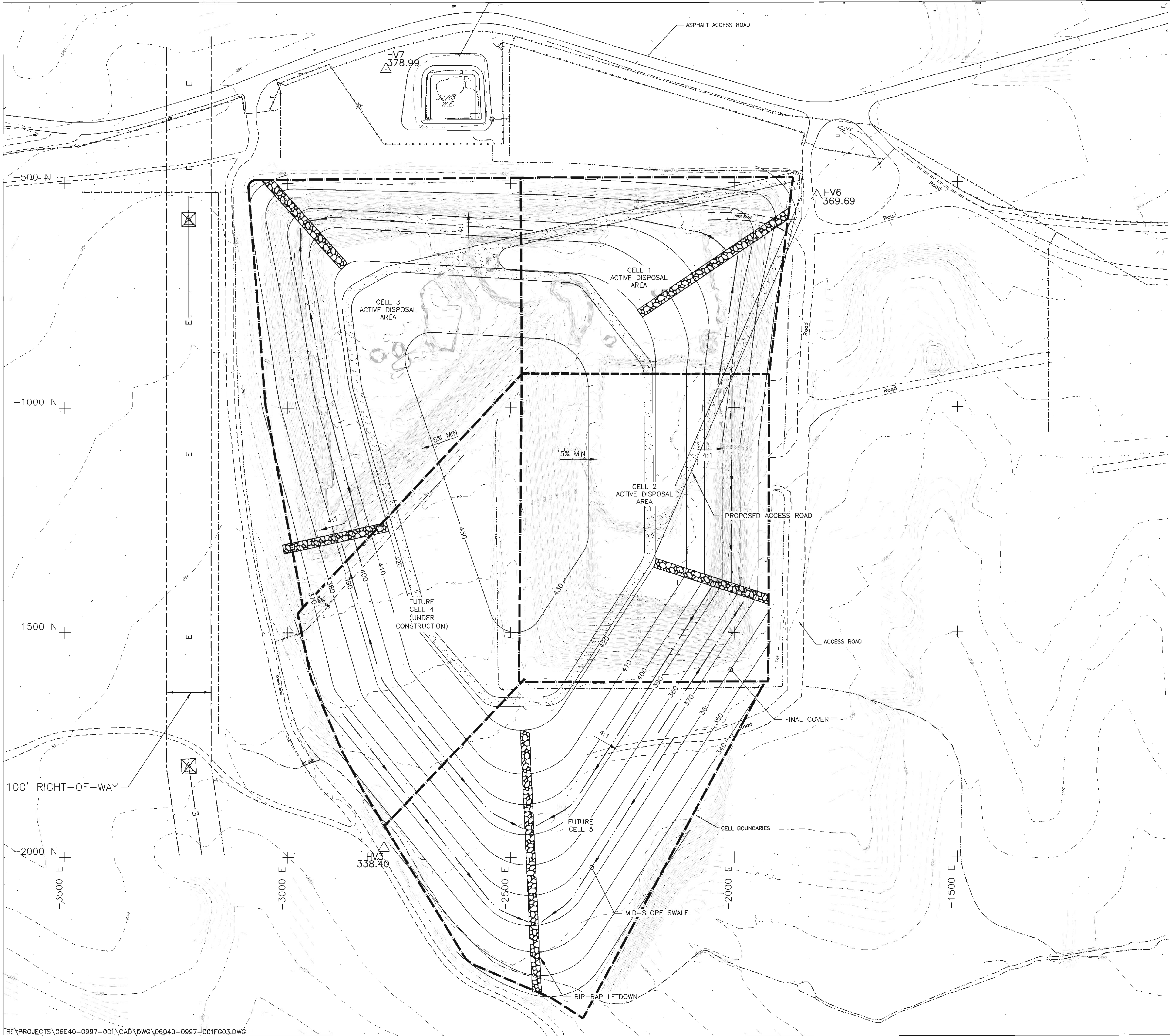


ENTERGY WHITE BLUFF PLANT  
CLASS 3N LANDFILL  
2015 ANNUAL ENGINEERING INSPECTION REPORT  
REDFIELD, ARKANSAS

FIGURE 2  
EXISTING CONDITIONS

DRAWN BY:	FILE NAME:
ppb	FG02.DWG
APPROVED:	PROJECT NO.
pmc	06040-0997-001
SCALE:	DATE:
1" = 100'	01/09/16
SHEET NO.	1 OF 1

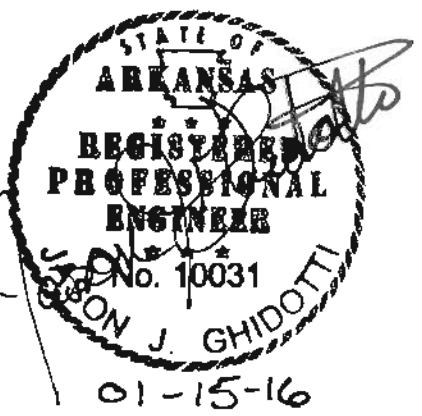




LEGEND

- EXISTING INDEX CONTOUR (10')
- EXISTING INTERMEDIATE CONTOUR (2')
- CELL BOUNDARIES (EXISTING PERMIT)
- WATER LINE
- ELECTRIC TRANSMISSION LINE
- PAVED ROAD
- UNPAVED ROAD
- SURVEY CONTROL POINT
- PROPOSED TOP OF FINAL COVER (10')
- PROPOSED ACCESS ROAD
- PROPOSED MID-SLOPE SWALE
- PROPOSED RIP-RAP LETDOWN

NOTES:  
1. TOPOGRAPHIC INFORMATION WITHIN THE ACTIVE LANDFILL AREA (CELLS 1-3) IS FROM A FIELD SURVEY BY HARMON SURVEYING, INC. (DECEMBER 2015). ADDITIONAL SITE TOPOGRAPHIC INFORMATION IS FROM AN AERIAL SURVEY BY AMI ENGINEERING, INC. (NOVEMBER 2011) AND FIELD SURVEYS BY HARMON SURVEYING, INC. (FEBRUARY 2012 AND MARCH 2015).



ENTERGY WHITE BLUFF PLANT  
CLASS 3N LANDFILL  
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REDFIELD, ARKANSAS

FIGURE 3  
PERMITTED TOP  
OF FINAL COVER

DRAWN BY: <i>JLB</i>	FILE NAME: FG03.DWG
APPROVED: <i>BWC</i>	PROJECT NO. 06040-0997-001
SCALE: 1" = 100'	DATE: 01/09/16
SHEET NO.	1 OF 1

## **APPENDIX B**

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**Copies of Weekly Landfill Inspections**

## WEEKLY LANDFILL INSPECTION

### Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by:

Norman E. Briley

[Must be performed by a qualified person per 257.84(a)(1)]

Inspection Date:

10-20-15

[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

1. 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? [Inspection criteria per 257.84(a)(1)(i)]

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

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Recommended Corrective Action/Responsible Party:

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Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

Entergy Facility: White Bluff

Inspection Date: 10-20-15  
[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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Facility:

White Bluff

## WEEKLY LANDFILL INSPECTION

### Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by:

Norman Brizer  
[Must be performed by a qualified person per 257.84(a)(1)(i)]

Inspection Date:

10-27-15  
[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

1. 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? [Inspection criteria per 257.84(a)(1)(i)]

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action/Responsible Party:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?
- ☒ No
- ☐ Yes (if yes, make photographs, describe and recommend a corrective action)
- Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?
- ☒ No
- ☐ Yes (if yes, make photographs, describe and recommend a corrective action)
- Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

Entergy Facility: White Bluff

Inspection Date: 10-27-15  
(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

**Instructions:**

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman B. [Signature]  
(Must be performed by a qualified person per 257.84(a)(1)(i))

Inspection Date: 11-3-15  
(Inspection Interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (Inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

Energy Facility: White Bluff

Inspection Date: 11-3-15  
(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

**Instructions:**

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman Brixey

[Must be performed by a qualified person per 257.84(a)(1)]

Inspection Date: 11-10-15

[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

1. 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? [inspection criteria per 257.84(a)(1)(i)]

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_



Energy Facility: White Bluff

Inspection Date: 11-10-15  
(Inspection Interval must not exceed 7 days per 257.84(a)(1)(i))

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

Entry Facility:

White Bluff

Inspection Date:

11-10-2015

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

**Instructions:**

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman Briley  
[Must be performed by a qualified person per 257.84(a)(4)(i)]

Inspection Date: 11-17-2015  
[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

1. 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? [Inspection criteria per 257.84(a)(1)(i)]

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

(Sign and Date)

Corrective Action Completed: \_\_\_\_\_

(Sign and Date)

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

Entergy Facility:

White Bluff

Inspection Date:

11-17-2015

[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action and Responsible Party:

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action and Responsible Party:

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

Energy Facility:

White Bluff

Inspection Date:

11-17-2015

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☐ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

**Instructions:**

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman Briley

(Must be performed by a qualified person per 257.84(a)(1))

Inspection Date: 11-24-15

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_



White Bluff

11-24-15

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

Entergy Facility: White Bluff

Inspection Date: 11-24-15  
[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## WEEKLY LANDFILL INSPECTION

## Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by:

Norman Briley

{Must be performed by a qualified person per 257.84(a)(1)}

Inspection Date:

12-1-15 2015

{Inspection interval must not exceed 7 days per 257.84(a)(1)(i)}

- 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? {Inspection criteria per 257.84(a)(1)(i)}

- Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action/Responsible Party:

Engineer Approval of Corrective Action (if required):

{Sign and Date}

Corrective Action Completed:

{Sign and Date}

- Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
[Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
[Sign and Date]

Energy Facility:

White Bluff

Inspection Date:

12-1-2015

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

### Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman Briley

(Must be performed by a qualified person per 257.84(a)(1))

Inspection Date: 12-8-2015

(Inspection Interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (Inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Energy Facility:

White Bluff

Inspection Date:

12-8-2015

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

Energy Facility:

White Bluff

Inspection Date:

12-9-2015

[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

## WEEKLY LANDFILL INSPECTION

**Instructions:**

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by: Norman Briley

(Must be performed by a qualified person per 257.84(a)(1))

Inspection Date: 12-15-2015

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (Inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action/Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

[Sign and Date]

Corrective Action Completed: \_\_\_\_\_

[Sign and Date]

Energy Facility: White Bluff

Inspection Date: 12-15-2015  
(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## WEEKLY LANDFILL INSPECTION

### Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by:

*12-22-15 Norman Bringer*  
(Must be performed by a qualified person per 257.84(a)(1)(i))

Inspection Date:

*12-22-15*  
(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (Inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action/Responsible Party:

Engineer Approval of Corrective Action (if required):

(Sign and Date)

Corrective Action Completed:

(Sign and Date)

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:



Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
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Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
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Engineer Approval of Corrective Action (if required): \_\_\_\_\_

(Sign and Date)

Corrective Action Completed: \_\_\_\_\_

(Sign and Date)

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_

(Sign and Date)

Corrective Action Completed: \_\_\_\_\_

(Sign and Date)

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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Recommended Corrective Action and Responsible Party: \_\_\_\_\_

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Engineer Approval of Corrective Action (if required): \_\_\_\_\_

(Sign and Date)

Corrective Action Completed: \_\_\_\_\_

(Sign and Date)

Entry Facility: White Bluff

Inspection Date: 12-22-15  
[Inspection interval must not exceed 7 days per 257.84(a)(3)(i)]

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments:

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## WEEKLY LANDFILL INSPECTION

### Instructions:

- Inspection applies to CCR Rule affected CCR units or cells only
- Provide detailed description of location, site sketches, and pictures of any noted deficiencies or issues
- Use additional sheets as necessary
- Following inspection, send electronic copy of Inspection Form and any attachments to Entergy facility Environmental Analyst and Entergy State Lead

Inspected by:

Josh Meyer

(Must be performed by a qualified person per 257.84(a)(1))

Inspection Date:

12-29-15

(Inspection interval must not exceed 7 days per 257.84(a)(1)(i))

1. 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? (Inspection criteria per 257.84(a)(1)(i))

- a. Any signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action/Responsible Party:

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- b. Any signs of tension or other types of cracks or separation at the surface or slopes?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- c. Any signs of erosion from storm water runoff or damage to stormwater control facilities (e.g. ditches, culverts, berms, and letdowns)?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required): \_\_\_\_\_  
 [Sign and Date]

Corrective Action Completed: \_\_\_\_\_  
 [Sign and Date]

- d. Any signs of burrowing or tunneling mammals that could lead to stability issues?

☒ No

☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Recommended Corrective Action and Responsible Party: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- e. Any signs of damage or operational issues with the leachate collection and transmission system (i.e., check pump and control panel, walk transmission line to see if there are any leaks, assess outlet)?

☒ No *N/A*☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party:

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

- f. If applicable, any signs of damage or operational issues with the final cover system - erosion, ponded water, settlement, leachate seeps, and vegetation?

☒ No☐ Yes (if yes, make photographs, describe and recommend a corrective action)

Location/Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended Corrective Action and Responsible Party:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Engineer Approval of Corrective Action (if required):

[Sign and Date]

Corrective Action Completed:

[Sign and Date]

Emergency Facility:

White Bluff

Inspection Date:

[Inspection interval must not exceed 7 days per 257.84(a)(1)(i)]

2. Were there any issues or recommended corrective actions from the previous weekly inspection left to address?

☒ No

☐ Yes (if yes, follow-up on any corrective actions taken)

Comments: \_\_\_\_\_

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## **APPENDIX C**

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**Photos of Annual Engineering Inspection**





Photo 1: Top of Cell 1



Photo 2: Perimeter berm, top of Cell 2



Photo 3: Access road from East



Photo 4: North slope of Cells 1 and 3, from top





Photo 5: Stormwater drainage ditch, east slope of Cells 1 and 2



Photo 6: North slope of Cell 3 and perimeter berm from North



Photo 7: Riprap lined letdown, southwest of Cell 3