

# Coal Ash Disposal Landfill Annual Site Inspection

NELSON POWER GENERATING STATION

*Prepared For:*

**ENTERGY LOUISIANA, LLC – NELSON POWER GENERATING STATION  
3500 HOUSTON RIVER ROAD, WESTLAKE, LA 70669**



*Prepared By:*

*Consultant:*

**Terry Elnaggar, PE  
Pivotal Engineering LLC  
1515 Poydras Street, Suite 1150  
New Orleans, LA 70112  
(504) 799-3653**

pivotal  
engineering

January 2025

## TABLE OF CONTENTS

1.0 Introduction.....	1
2.0 Review of Available Information .....	1
3.0 Visual Inspection .....	1
4.0 Summary .....	2
5.0 Certification .....	2

### **Figure**

Figure 1      Site Location Map

### **Attachment**

Attachment 1

Photo Log

## **1.0 Introduction**

In accordance with 40 CFR 257.84, the Unit 6 Coal Ash Disposal Landfill (CADL) at the Nelson Coal Generating Station (Nelson Plant) is required to perform weekly and annual inspections for actual or apparent structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the Coal Combustion Residuals (CCR) landfill. As shown on Figure 1, the site is located on Houston River Road in West Lake, Louisiana.

Pivotal Engineering LLC (Pivotal) was retained by Entergy Louisiana, LLC (Entergy) to assist in developing the weekly inspection criteria and conduct the annual inspection of the CADL. The weekly inspections are conducted by trained on-site personnel. Pivotal conducted the annual inspection on December 5, 2024.

## **2.0 Review of Available Information**

Per the CCR rule effective date October 19, 2015, Pivotal reviewed all the weekly inspection reports in 2024. The weekly inspection reports did not note any of the following concerns:

- Signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure,
- Signs of tension or other types of cracks or separation at the surface or slopes,
- Signs of erosion from storm water runoff or damage to storm water control facilities, and
- Signs of burrowing or tunneling mammals that could lead to stability issues.

Additionally, the landfill operator indicated that there were no issues regarding the stability of the landfill or the stockpiles of coal ash.

## **3.0 Visual Inspection**

On December 5, 2024 Pivotal made visual inspections of the CADL. Pivotal personnel inspected the entire perimeter of the landfill and inspected internal stockpiles for the following inspection requirements:

- Changes in geometry of the structure since the previous annual inspection;
- Approximate volume of the CCR contained in the unit at the time of the inspection;
- 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
- Changes which may have affected the stability or operation of the CCR unit since the previous annual inspection.

During the inspection, 10 photographs were taken to document the condition of the CCR unit. Descriptions and locations of the photographs are included in Attachment 1.

The annual inspection conducted on December 5, 2024 represents the tenth since the CCR rule became effective on October 19, 2015. During the inspection, no issues were noted that would affect the stability or operation of the CCR unit.

Pivotal noted minor changes to both the geometry of the internal stockpiles at the CADL and the perimeter levees and ditches. These will not affect the stability of the CCR unit.

On December 5, 2024, the approximate quantity of CCR at the CADL was 441,246 tons based on a topographic survey conducted in 2023 and subsequent production and sales of CCR.

#### 4.0 Summary

On December 5, 2024, Pivotal conducted the tenth required annual inspection of the CADL required under 40 CFR 257.84. The CADL was inspected to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted engineering standards.

Pivotal did not find any issues affecting the stability of the CCR landfill or conditions that are disrupting or could have the potential to disrupt the operation of the CADL.

#### 5.0 Certification

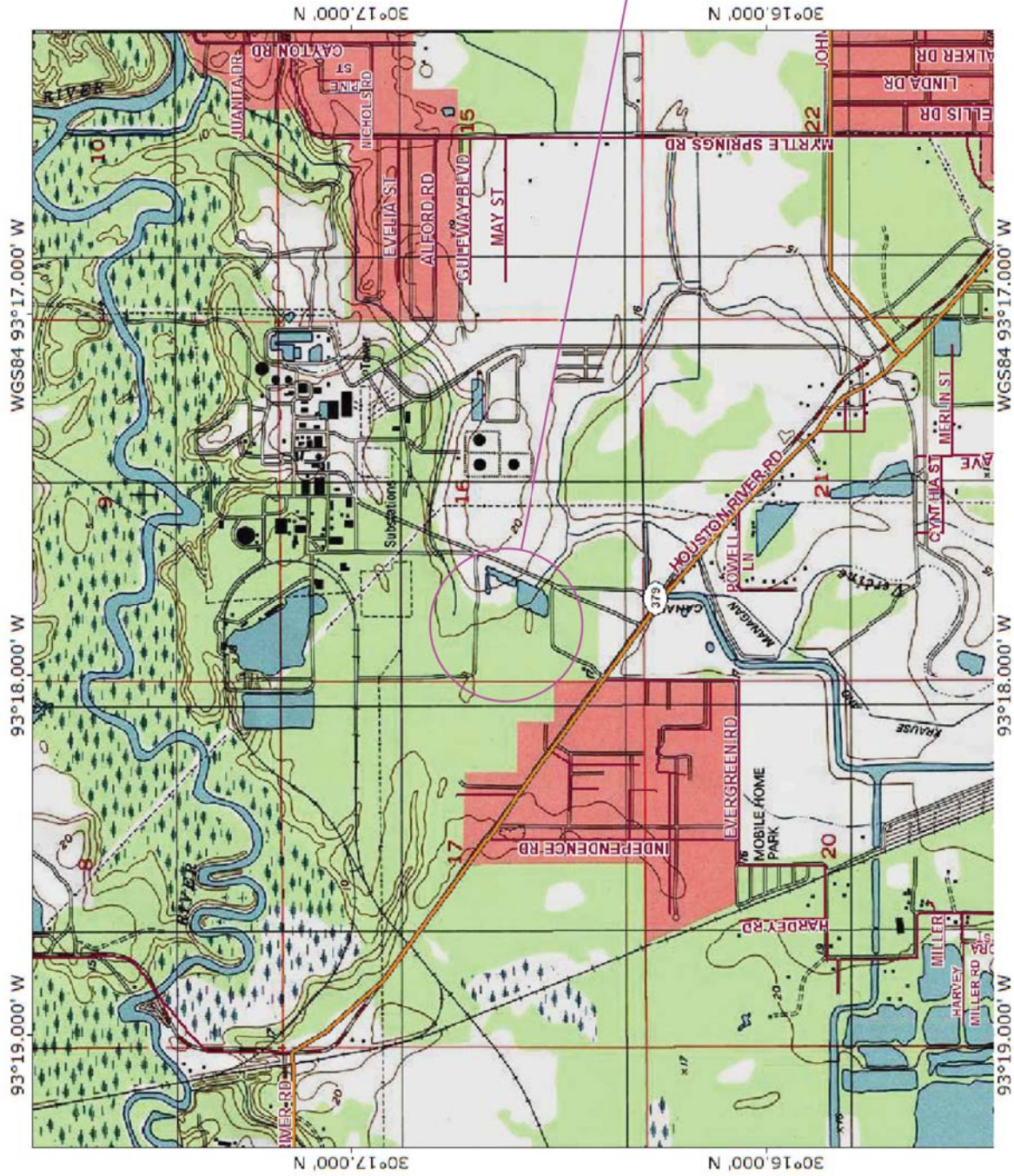
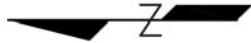
I hereby certify that I have inspected the facility and being familiar with the provisions of 40 CFR, Part 257.84.

Signature: \_\_\_\_\_  
Engineer: Tarek Elnaggar, PE  
Registration No: 23832  
State: Louisiana  
Date: January 6, 2025



**FIGURE**

**Figure 1**  
**Site Location Map**



SITE LOCATION

**COAL ASH DISPOSAL LANDFILL  
SITE LOCATION MAP**

**NELSON COAL GENERATING STATION**  
3500 HOUSTON RIVER ROAD, WESTLAKE, LOUISIANA

**Pivotal Engineering LLC**  
CIVIL, ELECTRICAL, ENVIRONMENTAL & MECHANICAL ENGINEERING  
1615 POTOMAS STREET, STE. 1676  
NEW ORLEANS, LA, 70112  
(504) 798-3683 (504) 798-3649(x3)

SCALE: NOT TO SCALE  
DATE: JANUARY 4, 2015  
JOB NO. 15-178

DRAWN BY: Y.S.  
CHECKED BY: T.E.

BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DESCRIPTION: \_\_\_\_\_  
REVISIONS: \_\_\_\_\_

FIG. NO. **1**

# **ATTACHMENT**

## **Attachment 1 Photo Log**

2024 Nelson Coal Ash Disposal Landfill Annual Inspection  
Photo Log



Photo 1 Northeast Corner Looking West



Photo 2 Northeast Corner Looking South



2024 Nelson Coal Ash Disposal Landfill Annual Inspection  
Photo Log



Photo 3 North Side Looking South



Photo 4 Northwest Corner Looking South

2024 Nelson Coal Ash Disposal Landfill Annual Inspection  
Photo Log



Photo 5 Northwest Corner Looking East



Photo 6 Southwest Corner Looking North

2024 Nelson Coal Ash Disposal Landfill Annual Inspection  
Photo Log



Photo 7 Southwest Corner Looking East



Photo 8 South Side Looking North

2024 Nelson Coal Ash Disposal Landfill Annual Inspection  
Photo Log



Photo 9 Southeast Corner Looking North



Photo 10 Southeast Corner Looking West