

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:

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January 2021

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1.0 Introduction

In accordance with 40 CFR 257.84, the Unit 6 Coal Ash Disposal Landfill (CADL) at the Nelson Power 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 1, 2020.

2.0 Review of Available Information

Per the CCR rule effective date October 19, 2015, Pivotal reviewed all weekly inspection reports up to the current date. Additionally, Pivotal visited the landfill operator's office to conduct interviews and review records. 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 1, 2020, Pivotal made visual inspections of the CADL. Pivotal personnel walked 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, 18 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 1, 2020 represents the sixth 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 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 1, 2020, approximate quantity of CCR at the CADL was 354,000 tons based on topographic survey (conducted in 2019) and subsequent production and sales of CCR.

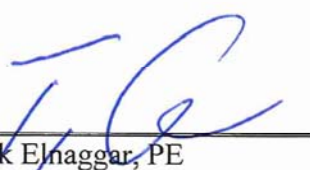
4.0 Summary

On December 1, 2020, Pivotal conducted the sixth 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

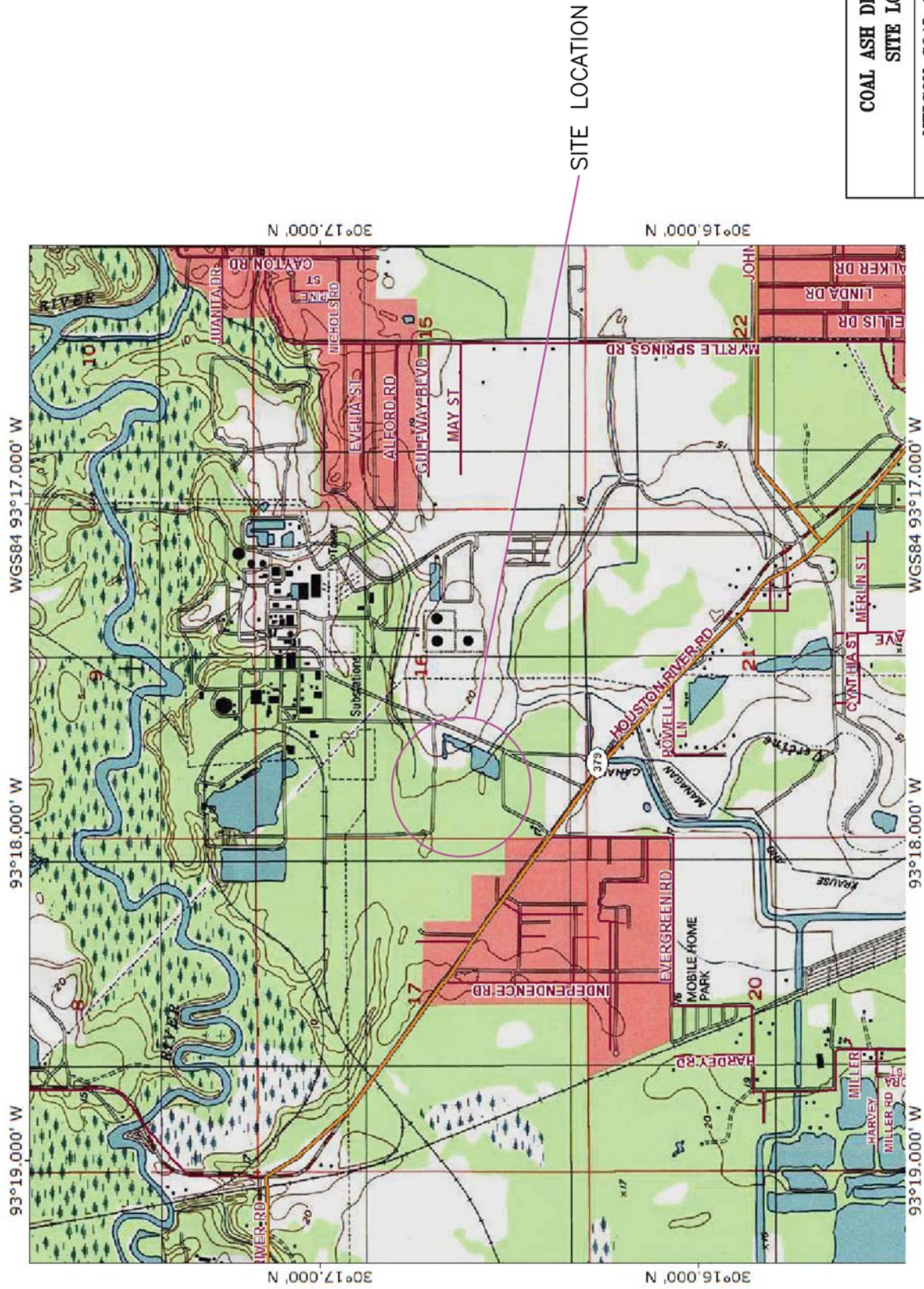
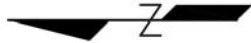
I hereby certify that I have inspected the facility and being familiar with the provisions of 40 CFR, Part 257.84.

Signature: 
Engineer: Tarek Elnaggar, PE
Registration No: 23832
State: Louisiana
Date: 11/5/2024



FIGURES

Figure 1 Site Location Map



COAL ASH DISPOSAL LANDFILL
SITE LOCATION MAP

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

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SCALE: NOT TO SCALE
DATE: JANUARY 4, 2015
JOB NO. 15-128

DRAWN BY: Y.S.
CHECKED BY: T.E.
FIG. NO. 1

DATE	DESCRIPTION	BY
	REVISIONS	

ATTACHMENTS

Attachment 1 Photo Log



Photo 1: Southwest Looking North



Photo 2: Southwest Looking North



Photo 3: Northwest Looking South



Photo 4: Northwest Looking South



Photo 5: Northwest Looking East



Photo 6: Northwest Looking East



Photo 7: Center North Looking West



Photo 8: Center North Looking Southwest



Photo 9: Center North Looking Southeast



Photo 10: Northeast Looking West



Photo 11: Northeast Looking West



Photo 12: Northeast Looking South



Photo 13: Southeast Looking North



Photo 14: Southeast Looking West



Photo 15: Southeast Looking West



Photo 16: Center South Looking North



Photo 17: Southwest Looking East



Photo 18: Southwest Looking East