

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 2018

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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 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 21, 2017.

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 21, 2017, 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, 14 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 21, 2017 represents the third 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 21, 2017, approximate quantity of CCR at the CADL was 229,000 tons based on topographic survey (conducted in 2015) and subsequent production and sales of CCR.

4.0 Summary

On December 21, 2017, Pivotal conducted the third 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

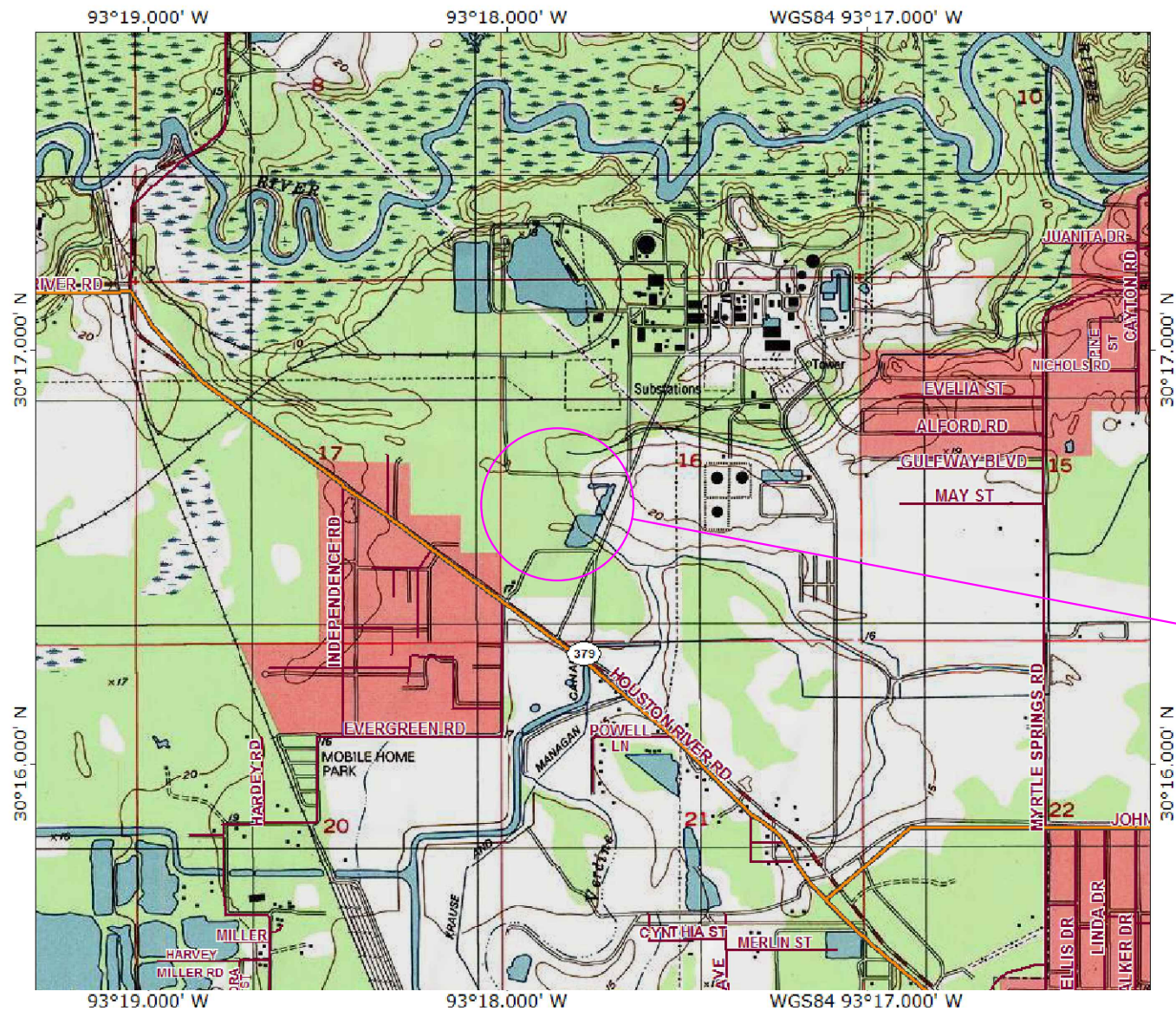
State: Louisiana

Date: _____

1/5/2018



FIGURE



SITE LOCATION

**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	DRAWN BY: Y.S.
DATE: JANUARY 4, 2015	CHECKED BY: T.E.
JOB NO. 15-125	FIG. NO. 1

DATE	DESCRIPTION	BY
	REVISIONS	

ATTACHMENT 1

PHOTO LOG



Photo 1, Southwest corner, looking north.



Photo 2 Southwest corner, looking east.



Photo 3, Southwest corner, looking northeast.



Photo 4, West side, looking east.



Photo 5, Northwest corner, looking southeast.



Photo 6, Northwest corner, looking east.



Photo 7, Northwest corner, looking south.



Photo 8, Northeast Corner of Cell #3, looking west.



Photo 9, Northeast Corner of Cell #3, looking southwest.



Photo 10, Northeast Corner of Cell #3, looking south



Photo 11, Southeast Corner of Cell #4, looking west



Photo 12, Southeast Corner of Cell #4, looking northwest



Photo 13, Southeast Corner of Cell #4, Looking north



Photo 14, Southeast Corner of Cell #4, Looking northeast