

CLECO POWER LLC

BRAME ENERGY CENTER



CCR ANNUAL INSPECTION

LANDFILL—CELL 4

JANUARY 2024

Providence Engineering and Environmental Group LLC
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Providence Project No: 002-326



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SECTION 1.0

GENERAL INFORMATION

ANNUAL CCR LANDFILL INSPECTION:			
Facility Name:		Cleco Brame Energy Center	
Address:		275 Rodemacher Rd. Lena, LA	
Landfill Name :	Landfill--Cell 4	Owner:	Cleco Power LLC
Surface Impoundment ID:	P-0379-R1-M1	Operator:	Cleco Power LLC
Nearest City:	Boyce	Parish:	Rapides
Inspector:		Gary J. Leonards, P.E.	
Company:		Providence Engineering & Environmental Group LLC	
Date of Inspection:		12/13/2023	
Weather at Time of Inspection:		Cloudy, Overcast	
DESCRIPTION OF THE OPERATION OF THE LANDFILL:			
<p>The Ash Management Landfill at the Brame Energy Center was originally designed and permitted to accept CFB ash generated from Madison Unit 3. The permit and the design were modified to allow for Cell 4 of the landfill to receive coal combustion residual (CCR) byproducts derived from burning of the Unit 2 coal for the generation of electricity. The landfill is classified by the Louisiana Department of Environmental Quality (LDEQ) as a Type I Landfill. Cleco began final closure of the Fly Ash pond in May of 2023. Stormwater and leachate from the landfill are routed to the leachate collection/landfill runoff pond. This water discharges into Lake Rodemacher via LPDES outfall 401, thence to Bayou Jean de Jean via LPDES outfall 001, then to the Red River. The minimum levee elevation for Ash Management Landfill is 105 feet NAVD 88. The maximum capacity of the entire landfill is 8,300,000 cubic yards. The maximum capacity of Cell 4 is 831,857 cubic yards.</p>			
1.0 GENERAL INFORMATION			
Owner Contact:	Elizabeth Lee	Phone:	318-793-1194
Director-Brame Energy Center	Chris Estes	Phone:	318-484-7679
Landfill Status:	Operational	Year Built:	2023 (cell 4)
Latitude:	31° 23.43' N	Longitude:	92° 42.26' W
Landfill Size:	89 acres (total), 14 acres (cell 4)		
Approximate Volume of CCR Stored in Landfill at Time of Inspection:		420,000 cubic yards	

SECTION 2.0

QUESTIONS FOR OWNER'S REPRESENTATIVE

2.0 QUESTIONS FOR OWNER'S REPRESENTATIVE	
Construction Plans Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Site Facility Map Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Operations and Maintenance Manual Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Emergency Action Plan Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Recent Modification or Improvements?	None
Are Routine Inspections Completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is Routine Maintenance Completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is There Vehicle Access to the Landfill?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are Routine Inspection Logs Kept On-site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Offsite Drainage Area:	Discharges to landfill runoff pond then to outfall 401 to Lake Rodemacher.

SECTION 3.0

SLOPE PROTECTION – EXTERIOR SLOPES

3.0 SLOPE PROTECTION – EXTERIOR SLOPES:	
Describe the vegetation on the exterior slope: (Check all that apply)	<input checked="" type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input type="checkbox"/> Other: (describe)
Is there any erosion on the exterior slope?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the exterior slopes? (e.g. riprap, other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (riprap - adequate, inadequate, etc.)	
Are there any cracks, sloughs, bulges, or indications of slope distress?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there an access ramp up the side slope or a road around the perimeter slope?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe (good condition, numerous cracks, aggregate uniformly distributed, etc.) Good Condition	
Are there any depressions, ruts, or holes on the access ramp?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Are there any trees or undesired vegetation on the slopes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (type of vegetation, size, location, etc.)	
Do any wet areas indicate seepage through the slope?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Are there any active seeps (flowing water) from the toe of the slope?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Is the stormwater being properly diverted by the existing infrastructure?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe (size, location, etc.)	
Is the stormwater infrastructure in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Findings:	The exterior slopes of Cell 4 were inspected and appeared to be in fair to good condition.
Other observations on the exterior slopes:	None

SECTION 4.0

UPPER ELEVATION - FLAT CAP PROTECTION

4.0 UPPER ELEVATION FLAT CAP PROTECTION:	
Describe the vegetation on the upper elevation flat cap area: (Check all that apply)	<input type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input checked="" type="checkbox"/> Other: (describe)
	No cover installed yet on landfill.
Is there any erosion on the upper elevation flat cap area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the upper elevation flat cap area? (e.g. riprap, other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (riprap - adequate, inadequate, etc.)	
Are there any trees or undesired vegetation on the upper elevation flat cap area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (type of vegetation, size, location, etc.)	
Is the storm water being properly diverted on the upper elevation flat cap area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Findings:	The upper elevation flat cap area was inspected and appeared to be in satisfactory condition. No cover installed yet on landfill.
Other observations on the upper elevation flat cap area:	None

SECTION 5.0
DOCUMENTATION REVIEW

5.0 DOCUMENTATION REVIEW:	
Weekly Inspections Reviewed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Findings:	Placing Cell 4 into service in 2023.
Groundwater Monitoring:	Monitoring wells are in-place for routine monitoring.
Drawings Reviewed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Any other change(s) which may have affected the stability or operation of the landfill since the previous annual inspection?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	Initial CCR inspection for Cell 4. Construction completed in 2023.
Are there any changes in the geometry of the landfill since the previous inspection?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
If yes, describe (size, location, etc.)	
Other observations:	None

APPENDIX A
PHOTOGRAPH LOG

Site Name: Brame Energy Center – Landfill Cell 4

Site Location: Lena, Rapides Parish, LA

Date: December 13, 2023

Landfill Cell 4

Direction:
Northwesterly

Comments:

Western levee,
access road, and
interior ditch



Landfill Cell 4

Direction:
Northeasterly

Comments:

Northwest slope,
leachate extraction
risers, and interior
ditch



Cleco Power LLC



Site Name: Brame Energy Center – Landfill Cell 4

Site Location: Lena, Rapides Parish, LA

Date: December 13, 2023

Landfill Cell 4

Direction:

Southeasterly

Comments:

Active portion of Cell 4



APPENDIX B
P.E. CERTIFICATION

**LANDFILL—CELL 4
CCR ANNUAL INSPECTION**

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I have inspected Cleco's Brame Energy Center Landfill--Cell 4 in accordance with the Annual CCR Inspection requirements. This inspection has determined that the design, construction, operation, and maintenance of Cell 4 of the Landfill is in accordance with generally accepted engineering standards.

Gary J. Leonards, P.E.

Name

30568

Registration No.

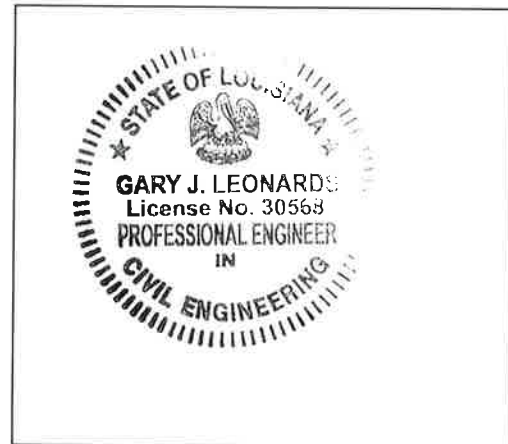
LA

State

Signature

1/16/24

Date



(Seal)

This inspection was conducted to assess the general overall condition of the landfill, identify visible deficiencies, and recommend areas for monitoring, and corrective actions. The inspection is based only on visible features/areas of the landfill on the day of inspection. The owner should verify the findings of this report and take corrective actions. This inspection does not relieve the owner/operator from their responsibility to conduct routine inspections, maintenance, repairs, modifications, monitoring, and documentation.