# 2015 ANNUAL INSPECTION REPORT CALEDONIA ASH LANDFILL

#### 1.0 INTRODUCTION

This annual inspection report has been prepared to meet the requirements of 40 CFR 257.84(b).

The active area of the Caledonia Ash Landfill is divided into a disposal area and various segregated coal combustion residuals (CCR) stockpiles, which are staged for eventual beneficial utilization. The Caledonia Ash Landfill also includes areas that have been filled and have a final cover in place.

#### 2.0 ANNUAL SITE INSPECTION

The annual inspection by a qualified professional engineer to meet the requirements of 40 CFR 257.84(b) was conducted by Timothy C. Muehlfeld on November 19, 2015. The inspection form and photos are attached and the inspection results are summarized below. This inspection is the first annual inspection under the 40 CFR Part 257 rules, so requirements for comparison to previous annual inspections are not applicable.

#### 3.0 INSPECTION RESULTS

#### Review of Available Information:

Review of the weekly inspections by a qualified person was conducted as part of the annual site inspection. There were no significant issues identified during the weekly inspections and action items were addressed in a timely manner. The weekly inspections were complete and are included in the operating record.

#### Discussion of Visual Inspection:

The annual site inspection included an inspection of the perimeter berms, waste surfaces and slopes, final covers, interior and exterior storm water controls, the leachate collection list station, the leachate storage and load-out controls, the leachate load-out pad, the site access road and the cell entrance.

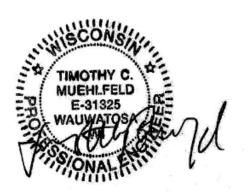
There were no signs or evidence of any distress or malfunction of the CCR unit, or any conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. The perimeter berms and waste slopes did not show any evidence of structural weakness or instability. The leachate lift station and load-out facilities were operational and there was plenty of available space for leachate storage in the leachate collection system and storage tanks. The interior and exterior storm water controls were free of obstruction and provided plenty of capacity for storm water storage and conveyance. The access road, load-out pad and cell entrance were clean and free of obstructions. The fugitive dust control plan appears to be effective as there was no evidence of fugitive dust around the perimeter of the landfill.

#### 4.0 APPROXIMATE VOLUME OF CCR CONTAINED IN THE UNIT

At the time of the annual inspection, there were approximately 1,603,000 cubic yards of CCR disposed of at the Caledonia Ash Landfill.

#### 5.0 CERTIFICATION

I, Timothy C. Muehlfeld, hereby certify that I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR 257.84.



Form Date: 10/19/2015

#### **CALEDONIA LANDFILL - WEEKLY INSPECTION & CONDITION SUMMARY**

**INSPECTOR:** Tim Muehlfeld

**INSPECTION DATE/TIME**: 11/19/2015 11:45 AM

WEATHER:

Temperature: 42° F
Conditions: Sunny
Wind: Strong
Wind Direction: W
Precipitation: None

LEACHATE COLLECTION SYSTEM:								
Load-out Facility:	South Tank North Tank		Lift Station:					
High level alarms:	No	No	Pump #1:	Green				
Low level alarms:	No	No	Pump #2:	Green				
Leak alarms	No	No	Control Panel:	Green				
Levels:	Half	Half	Inlet Pipes:	Exposed				
Pump:	Green	Green	Note: Exposed inle	et pipes means leachate is				
Pad Condition:	Good		free-flowing into lift station					

Visual inspection of all leachate manhole inverts performed on Note:

WETLAND CONTROL					
Pump station operational :	Yes	Pump Discharge: Yes			
Vetland level below culvert inlet :	No	Note: If wetland level is above culvert inlet,			
Culvert inlet clear :	Yes	make sure pump is discharging into ditch on			
Comments :	Heavy rains recently. Culvert about 1/3 full. Pumps almost caught up.	east side of access road			

Note:

STORMWATER / EROSION CO Landfill Perimeter Ditches :		STABILITY	
Ditch Check Dams :	✓		
Silt Fence @ Soil Stockpiles:	✓		
Diversion Berms, Ditches & Check Dams @ Clay Stockpile :	Ø	Stability/Erosion of Covers & Waste Slopes:	
Culverts (Inlets & Outlets) : Comments :	Ø.	Appear stable & no significant erosion:	Yes

Note: Check mark indicates that the stormwater controls are adequate.

LANDFILL OPERATIONS:						
Fugitive Dust Control:	In-Cell Stormwater Management				nagement	
Tracking Pads :	✓	Upper Dit	ch:	<b>√</b>		
Cattle Guards :	✓	Lower Dit	ch:	<b>V</b>		
Wheel Wash:	✓	Down Flur	ne:	~		
Access Road Clean:	✓	Culve	rts:	<b>√</b>		
Landfill Surfaces Groomed:	~	Reservo	rs:	V		
Airbourne Dust Visible:	N	o Sedime	nt:		Good	
Sign of Recent Dust Deposition:	N	o Standing Wat	er:		Yes	
		water left in cells after r CCR surfaces. No dust e				l. Tanker

Note: Check mark indicates that the features are acceptable.



Leachate Load-Out (looking south)



Leachate Load-Out & Storage Panel



West Side Final Covers (looking north)



Cell Entrance (looking west)



West Berm Cell 10 (looking north)



Wheel Wash at Cell Entrance/Exit



Access Road (looking north)



Dust Control in Cell 8



West Perimeter Upper Berm (looking south)



North Perimeter (Intercell) Berm (looking east)



Active Area (looking southeast from northwest corner)



East Perimeter Berm (looking north)



Repairing Erosion in East Stormwater Storage Area



East Side Final Covers (looking north)



**Lift Station Controls** 



Exterior Ditch on East Side (looking north)