



HALEY & ALDRICH, INC.  
6500 Rockside Road  
Suite 200  
Cleveland, OH 44131  
216.706.1303

August 14, 2020  
File No. 129778-037

Evergy Kansas Central, Inc. (f/k/a Westar Energy, Inc.)  
818 South Kansas Avenue  
Topeka, Kansas 66612

Attention: Jared Morrison – Director, Water and Waste Programs

Subject: Notification of Returning to Detection Monitoring Program  
Jeffrey Energy Center  
Flue Gas Desulfurization Landfill

Dear Mr. Morrison:

On behalf of Evergy Kansas Central, Inc. (f/k/a Westar Energy, Inc.), in accordance with Title 40 Code of Federal Regulations (40 CFR) § 257.105(h)(7) of the U.S. Environmental Protection Agency Federal Coal Combustion Residuals (CCR) Rule (40 CFR §§ 257 and 261), Haley & Aldrich, Inc. has prepared this notification that a return to detection monitoring has occurred for the Flue Gas Desulfurization Landfill (FGD Landfill) at the Jeffrey Energy Center. In accordance with 40 CFR § 257.95(e), if the concentrations of Appendix III and detected Appendix IV constituents are shown to be at or below background values for two consecutive sampling events, the facility operator may return to detection monitoring of the CCR unit.

Two semi-annual assessment monitoring sampling events were completed in September 2019 and March 2020, with statistical evaluations completed in January 2020 and July 2020, respectively. Statistical evaluations were completed in accordance with 40 CFR § 257.93(g) and did not indicate any Appendix III or detected Appendix IV constituents above background values (Table 1 through Table 4).

The detection monitoring program has been established to meet the requirements of 40 CFR § 257.94.

Sincerely yours,  
HALEY & ALDRICH, INC.

A handwritten signature in black ink, appearing to read "Steve Putrich".

Steve Putrich, P.E.  
Project Consultant

A handwritten signature in blue ink, appearing to read "Mark Nicholls".

Mark Nicholls, P.G.  
Lead Hydrogeologist

## **TABLES**

**TABLE I**  
**SUMMARY OF SEMI-ANNUAL DETECTION GROUNDWATER MONITORING STATISTICAL EVALUATION**  
 SEPTEMBER 2019 SAMPLING EVENT  
 APPENDIX III CONSTITUENTS  
 JEFFREY ENERGY CENTER  
 FLUE GAS DESULFURIZATION LANDFILL



Well #	September 2019 Sampling Result	Outlier Removed	Analysis (Interwell)	Background Value (UPL) <sup>1</sup>	SSI (Yes/No)
<b>CCR Appendix-III Boron, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.11	No		10.600	
MW-FGD-6 (upgradient)	9.8	No			
MW-FGD-2	0.21	No	Interwell		No
MW-FGD-3	0.15	No	Interwell		No
MW-FGD-4	0.30	No	Interwell		No
MW-FGD-9	0.48	No	Interwell		No
<b>CCR Appendix-III Calcium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	92.2	No		627.000	
MW-FGD-6 (upgradient)	583.0	No			
MW-FGD-2	201	No	Interwell		No
MW-FGD-3	197	No	Interwell		No
MW-FGD-4	240	No	Interwell		No
MW-FGD-9	116	No	Interwell		No
<b>CCR Appendix-III Chloride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	50.8	No		2120	
MW-FGD-6 (upgradient)	2100	No			
MW-FGD-2	65.5	No	Interwell		No
MW-FGD-3	98.0	No	Interwell		No
MW-FGD-4	134	No	Interwell		No
MW-FGD-9	38.0	No	Interwell		No
<b>CCR Appendix-III Fluoride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.25	No		1.800	
MW-FGD-6 (upgradient)	0.91	No			
MW-FGD-2	<0.20	No	Interwell		No
MW-FGD-3	<0.20	No	Interwell		No
MW-FGD-4	<0.20	No	Interwell		No
MW-FGD-9	0.42	No	Interwell		No
<b>CCR Appendix-III pH, Total (SU)</b>					
MW-FGD-1 (upgradient)	7.3	No		8.2	
MW-FGD-6 (upgradient)	7.0	No			
MW-FGD-2	7.2	No	Interwell		No
MW-FGD-3	7.2	No	Interwell		No
MW-FGD-4	7.0	No	Interwell		No
MW-FGD-9	7.3	No	Interwell		No
<b>CCR Appendix-III Sulfate, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	99.3	No		3190	
MW-FGD-6 (upgradient)	2790	No			
MW-FGD-2	426	No	Interwell		No
MW-FGD-3	419	No	Interwell		No
MW-FGD-4	640	No	Interwell		No
MW-FGD-9	251	No	Interwell		No
<b>CCR Appendix-III TDS (mg/L)</b>					
MW-FGD-1 (upgradient)	524	No		8140	
MW-FGD-6 (upgradient)	6730	No			
MW-FGD-2	1030	No	Interwell		No
MW-FGD-3	1080	No	Interwell		No
MW-FGD-4	1480	No	Interwell		No
MW-FGD-9	667	No	Interwell		No

**Notes:**

<sup>1</sup> Based on a minimum of eight (8) background samples collected between 08/24/2016 through 09/10/2018

CCR = coal combustion residuals

mg/L = milligrams per Liter

SSI = Statistically Significant Increase

TDS = total dissolved solids

UPL = upper prediction limits

**TABLE II**  
**SUMMARY OF SEMI-ANNUAL ASSESSMENT GROUNDWATER MONITORING STATISTICAL EVALUATION**  
 SEPTEMBER 2019 SAMPLING EVENT  
 APPENDIX IV CONSTITUENTS  
 JEFFREY ENERGY CENTER  
 FLUE GAS DESULFURIZATION LANDFILL

Well #	September 2019 Sampling Result	Outliers Removed	Analysis (Interwell)	Background Value (UTL) <sup>1</sup>	SSI (Yes/No)
<b>CCR Appendix-IV Arsenic, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.017	
MW-FGD-6 (upgradient)	0.0047	None			
MW-FGD-2	<0.0010	None	Interwell		No
MW-FGD-3	<0.0010	None	Interwell		No
MW-FGD-4	<0.0010	None	Interwell		No
MW-FGD-9	0.0025	None	Interwell		No
<b>CCR Appendix-IV Barium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.27	None		0.310	
MW-FGD-6 (upgradient)	0.019	None			
MW-FGD-2	0.068	None	Interwell		No
MW-FGD-3	0.082	None	Interwell		No
MW-FGD-4	0.045	None	Interwell		No
MW-FGD-9	0.090	None	Interwell		No
<b>CCR Appendix-IV Cobalt, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.0087	
MW-FGD-6 (upgradient)	0.0017	None			
MW-FGD-2	0.0020	None	Interwell		No
MW-FGD-3	<0.0010	None	Interwell		No
MW-FGD-4	<0.0010	None	Interwell		No
MW-FGD-9	0.0018	None	Interwell		No
<b>CCR Appendix-IV Fluoride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.25	None		1.800	
MW-FGD-6 (upgradient)	0.91	None			
MW-FGD-2	<0.20	None	Interwell		No
MW-FGD-3	<0.20	None	Interwell		No
MW-FGD-4	<0.20	None	Interwell		No
MW-FGD-9	0.42	None	Interwell		No
<b>CCR Appendix-IV Lithium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.010	None		0.450	
MW-FGD-6 (upgradient)	0.39	None			
MW-FGD-2	<0.010	None	Interwell		No
MW-FGD-3	0.016	None	Interwell		No
MW-FGD-4	0.013	None	Interwell		No
MW-FGD-9	<0.010	None	Interwell		No
<b>CCR Appendix-IV Molybdenum, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.0013	None		0.520	
MW-FGD-6 (upgradient)	0.036	None			
MW-FGD-2	0.0035	None	Interwell		No
MW-FGD-3	0.0052	None	Interwell		No
MW-FGD-4	0.0035	None	Interwell		No
MW-FGD-9	0.0095	None	Interwell		No
<b>CCR Appendix-IV Radium-226 &amp; 228 Combined (pCi/L)</b>					
MW-FGD-1 (upgradient)	1.80	None		4.92	
MW-FGD-6 (upgradient)	6.68	None			
MW-FGD-2	1.180	None	Interwell		No
MW-FGD-3	0.403	None	Interwell		No
MW-FGD-4	1.11	None	Interwell		No
MW-FGD-9	0.786	None	Interwell		No
<b>CCR Appendix-IV Selenium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.0046	
MW-FGD-6 (upgradient)	<0.0010	None			
MW-FGD-2	0.0015	None	Interwell		No
MW-FGD-3	<0.0010	None	Interwell		No
MW-FGD-4	<0.0010	None	Interwell		No
MW-FGD-9	<0.0010	None	Interwell		No

**Notes and Abbreviations:**

<sup>1</sup> Based on a minimum of eight (8) background samples collected between 08/24/2016 through 03/27/2019

- CCR = coal combustion residuals
- MCL = maximum contaminant level
- mg/L = milligrams per Liter
- NA = not analyzed
- pCi/L = picoCuries per Liter
- SSI = statistically significant increase
- UTL = upper tolerance limits

**TABLE III**  
**SUMMARY OF SEMI-ANNUAL DETECTION GROUNDWATER MONITORING STATISTICAL EVALUATION**  
MARCH 2020 SAMPLING EVENT  
APPENDIX III CONSTITUENTS  
JEFFREY ENERGY CENTER  
FLUE GAS DESULFURIZATION LANDFILL

Well #	March 2020 Sampling Result	Outlier Removed	Analysis (Interwell)	Background Value (UPL) <sup>1</sup>	SSI (Yes/No)
<b>CCR Appendix-III Boron, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.11	No		11.000	
MW-FGD-6 (upgradient)	10.6	No			
MW-FGD-2	0.21	No	Interwell		No
MW-FGD-3	0.16	No	Interwell		No
MW-FGD-4	0.34	No	Interwell		No
MW-FGD-9	0.42	No	Interwell		No
<b>CCR Appendix-III Calcium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	100	No		658.000	
MW-FGD-6 (upgradient)	650	No			
MW-FGD-2	216	No	Interwell		No
MW-FGD-3	228	No	Interwell		No
MW-FGD-4	282	No	Interwell		No
MW-FGD-9	122	No	Interwell		No
<b>CCR Appendix-III Chloride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	50.6	No		2180	
MW-FGD-6 (upgradient)	2180	No			
MW-FGD-2	62.5	No	Interwell		No
MW-FGD-3	121	No	Interwell		No
MW-FGD-4	161	No	Interwell		No
MW-FGD-9	35.7	No	Interwell		No
<b>CCR Appendix-III Fluoride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.31	No		3.400	
MW-FGD-6 (upgradient)	1.2	No			
MW-FGD-2	0.22	No	Interwell		No
MW-FGD-3	< 0.20	No	Interwell		No
MW-FGD-4	0.33	No	Interwell		No
MW-FGD-9	0.45	No	Interwell		No
<b>CCR Appendix-III pH, Total (SU)</b>					
MW-FGD-1 (upgradient)	7.4	No		8.1	
MW-FGD-6 (upgradient)	7.0	No			
MW-FGD-2	7.1	No	Interwell		No
MW-FGD-3	7.0	No	Interwell		No
MW-FGD-4	7.0	No	Interwell		No
MW-FGD-9	7.2	No	Interwell		No
<b>CCR Appendix-III Sulfate, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	91.5	No		3190	
MW-FGD-6 (upgradient)	2700	No			
MW-FGD-2	422	No	Interwell		No
MW-FGD-3	473	No	Interwell		No
MW-FGD-4	726	No	Interwell		No
MW-FGD-9	211	No	Interwell		No
<b>CCR Appendix-III TDS (mg/L)</b>					
MW-FGD-1 (upgradient)	529	No		8140	
MW-FGD-6 (upgradient)	8060	No			
MW-FGD-2	1010	No	Interwell		No
MW-FGD-3	1160	No	Interwell		No
MW-FGD-4	1590	No	Interwell		No
MW-FGD-9	692	No	Interwell		No

**Notes:**

<sup>1</sup> Based on a minimum of eight (8) background samples collected between 08/24/2016 through 03/05/2020

CCR = coal combustion residuals

mg/L = milligrams per Liter

SSI = Statistically Significant Increase

TDS = total dissolved solids

UPL = upper prediction limits

**TABLE IV**  
**SUMMARY OF SEMI-ANNUAL ASSESSMENT GROUNDWATER MONITORING STATISTICAL EVALUATION**  
MARCH 2020 SAMPLING EVENT  
APPENDIX IV CONSTITUENTS  
JEFFREY ENERGY CENTER  
FLUE GAS DESULFURIZATION LANDFILL



Well #	March 2020 Sampling Result	Outliers Removed	Analysis (Interwell)	Background Value (UTL) <sup>1</sup>	SSI (Yes/No)
<b>CCR Appendix-IV Arsenic, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.019	
MW-FGD-6 (upgradient)	0.0074	None			
MW-FGD-2	< 0.0010	None	Interwell		No
MW-FGD-3	< 0.0010	None	Interwell		No
MW-FGD-4	< 0.0010	None	Interwell		No
MW-FGD-9	0.0016	None	Interwell		No
<b>CCR Appendix-IV Barium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.28	None		0.310	
MW-FGD-6 (upgradient)	0.016	None			
MW-FGD-2	0.061	None	Interwell		No
MW-FGD-3	0.074	None	Interwell		No
MW-FGD-4	0.054	None	Interwell		No
MW-FGD-9	0.081	None	Interwell		No
<b>CCR Appendix-IV Cobalt, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.0087	
MW-FGD-6 (upgradient)	< 0.0010	None			
MW-FGD-2	0.0020	None	Interwell		No
MW-FGD-3	< 0.0010	None	Interwell		No
MW-FGD-4	< 0.0010	None	Interwell		No
MW-FGD-9	< 0.0010	None	Interwell		No
<b>CCR Appendix-IV Fluoride, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.31	None		3.400	
MW-FGD-6 (upgradient)	1.2	None			
MW-FGD-2	0.22	None	Interwell		No
MW-FGD-3	< 0.20	None	Interwell		No
MW-FGD-4	0.33	None	Interwell		No
MW-FGD-9	0.45	None	Interwell		No
<b>CCR Appendix-IV Lithium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.015	None		0.450	
MW-FGD-6 (upgradient)	0.45	None			
MW-FGD-2	0.012	None	Interwell		No
MW-FGD-3	0.02	None	Interwell		No
MW-FGD-4	0.019	None	Interwell		No
MW-FGD-9	< 0.010	None	Interwell		No
<b>CCR Appendix-IV Molybdenum, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	0.0013	None		0.520	
MW-FGD-6 (upgradient)	0.014	None			
MW-FGD-2	0.0038	None	Interwell		No
MW-FGD-3	0.0057	None	Interwell		No
MW-FGD-4	0.0035	None	Interwell		No
MW-FGD-9	0.0092	None	Interwell		No
<b>CCR Appendix-IV Radium-226 &amp; 228 Combined (pCi/L)</b>					
MW-FGD-1 (upgradient)	1.01	None		9.02	
MW-FGD-6 (upgradient)	7.24	None			
MW-FGD-2	0.181	None	Interwell		No
MW-FGD-3	0.533	None	Interwell		No
MW-FGD-4	0.668	None	Interwell		No
MW-FGD-9	0.952	None	Interwell		No
<b>CCR Appendix-IV Selenium, Total (mg/L)</b>					
MW-FGD-1 (upgradient)	<0.0010	None		0.0046	
MW-FGD-6 (upgradient)	< 0.0010	None			
MW-FGD-2	< 0.0010	None	Interwell		No
MW-FGD-3	< 0.0010	None	Interwell		No
MW-FGD-4	< 0.0010	None	Interwell		No
MW-FGD-9	< 0.0010	None	Interwell		No

**Notes:**

- <sup>1</sup> Based on a minimum of eight (8) background samples collected between 08/24/2016 through 03/05/2020.
- CCR = coal combustion residuals
- MCL = maximum contaminant level
- mg/L = milligrams per Liter
- NA = not analyzed
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- UTL = upper tolerance limits