October 27, 2023

Daniela Ortiz de Montellano, Project Manager
Industrial and Hazardous Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

RE: New Coal Combustion Residuals (CCR) Registration No. CCR1
Technical NOD Response – Request for Clarification
Lower Colorado River Authority Fayette Power Project – La Grange, Fayette County
Industrial Solid Waste Registration No. 31575
EPA Identification No. TXD083566547
Tracking No. 27214088; RN100226844/CN600253637

Dear Ms. Ortiz de Montellano,

The Lower Colorado River Authority is in receipt of your email dated October 26, 2023, outlining TCEQ's request for additional information and clarification of previously submitted information regarding the Coal Combustion Residuals registration application for the above referenced facility (dated January 24, 2022, revised October 28, 2022, and September 14, 2023). Our responses are outlined below, corresponding to the numbering in your letter. In addition, we have included a redline/strike out version of the application changes as well as replacement pages, where necessary.

19. Application Section I.6 and IV.A

Correct the capacity of the landfill in one of the tables for consistency.

The capacity of the landfill on Table I.6 contained a typo and has been updated. A redline/strikeout and clean replacement copy of the updated table are attached.

20. Application Section VI.29.B

Reference the source of the data used to calculate the average groundwater velocity of 50 feet per year in the intermediate sand. The original registration application submitted in January 2022 indicates variable groundwater flow velocities ranging from 19 to 72 feet per year, pdf pages 222 and 357 respectively.

The groundwater flow velocity in the vicinity of CBL-341I averages approximately 50 feet per year, as calculated using the Eastern Transect gradients ranging from 41 to 72 feet per year, as reported in the Annual Groundwater Monitoring Reports (2017-2022). A redline/strikeout and clean version of page 3 of the Background Evaluation Report including this reference are attached.

21. Application Section VI.28 and VI.29.B

Explain how the outliers will be analyzed once the sample size is greater than 25, if the Dixon's test is recommended for sample sizes up to 25 in accordance with Section 8-15 of the EPA

Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009. Revise the attachments accordingly.

As noted, the Dixon test is recommended for sample sizes where n </=25; however, Dumpstats successfully and appropriately uses the expanded Dixon test for sample sizes up to n=100. Therefore, the expanded Dixon test is appropriate for use at FPP and will be used for sample sizes up to n=100. A paper authored by Surendra Verma and Alfredo Quiroz-Ruiz demonstrates and explains the basis for the expanded Dixon test and can be found here: https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1026-87742006000200003.

22. Application Section VI.29.B

Clarify your statement that fluoride does not have an established maximum contaminant level (MCL) and revise Table 3. In accordance with Appendix I to Part 257, fluoride has an MCL of 4.0 mg/l.

The statement that fluoride does not have an established MCL was a typo limited to the previous response letter. Table 3 shows the MCL of 4.0 mg/l established for fluoride and as a result no changes were made to Table 3.

Additional Applications updates

We have included replacement cover pages for the Background Evaluation Report and the Statistical Analysis Plan that remove the word “draft”.

Although we mentioned during our October 26, 2023 meeting that we were considering updates to the Fugitive Dust Control Plan, we have decided no changes are warranted at this time.

If you have any questions or would like additional information, please feel free to contact me at 512-578-3205.

Sincerely,

Kate McCarthy

Kate McCarthy, P.G.
Senior Environmental Coordinator

Enclosures: Table I.6 – Redline/Strikeout
Revised Table I.6
Background Evaluation Report Page 3 – Redline/Strikeout
Revised Background Evaluation Report Page 3
Background Evaluation Report Updated Cover Page
Statistical Analysis Plan Updated Cover Page

Table I.6 – Redline/Strikeout and Revised

Table I.6. – CCR Waste Management Units

CCR Unit No.[1]	Unit Name	N.O.R. No.[1]	Unit Description[3]	Capacity	Unit Status[2]
CCR-1	Combustion Byproduct Landfill (CBL)	013	Cells 1 and 2D	12,400~~0~~,000 Cu yds	Active
			Cells 2A, 2B, 2C and 3		Proposed[4]

1 Registered Unit No. and N.O.R. No. cannot be reassigned to new units or used more than once.
2 Unit Status options: Active, Closed, Inactive (built but not managing waste), Proposed (not yet built), Never Built, Transferred, Post-Closure.
3 If a unit has been transferred, the applicant should indicate which facility/permit it has been transferred to in the Unit Description column.
4 No schedule for development at the time of application submittal.

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Background Evaluation Report Page 3 – Redline/Strikeout and Revised

1. INTRODUCTION

This report describes the groundwater data background evaluation conducted at the Lower Colorado River Authority's (LCRA's) Fayette Power Project (FPP) Combustion Byproducts Landfill (CBL) from 2016-2022. The CBL is a coal combustion residuals (CCR) landfill subject to the U.S. Environmental Protection Agency's (EPA's) CCR regulations and the Texas Commission on Environmental Quality's (TCEQ's) CCR registration program. EPA's CCR regulations, also referred to as the "CCR Rule," are codified in 40 CFR Part 257, Subpart D, and have been adopted by TCEQ under Chapter 352 of Title 30 of the Texas Administrative Code (30 TAC Ch. 352).

The uppermost groundwater bearing unit (GWMU) beneath the CBL is identified as the "Intermediate Sand" and is monitored by the CBL's groundwater monitoring system (GWMS), consisting of wells CBL-301I, CBL-302I, CBL-306I, CBL-308I, CBL-340I, and CBL-341I, which are all screened within the Intermediate Sand. The background evaluation, including statistical analysis of background data documented herein, has been conducted as required by 40 CFR § 257.93.

Statistical comparisons and evaluation for statistically significant increases (SSIs) are conducted on all wells with the exception of former background (side-gradient) monitoring well CBL-340I. Based on the Alternative Source Determination (ASD) study conducted in 2018 (Amec Foster Wheeler, April 2018a, and 2018b), the identification of natural aquifer heterogeneity resulted in the determination that CBL-340I could not be reliably used to characterize the background geochemistry of the groundwater flowing beneath the CCR unit. As such, intrawell analysis of wells potentially affected by CCR operations was selected at that time, and the need for use of CBL-340I geochemical data for statistical comparison was negated. A Groundwater Monitoring System Addendum Certification was prepared in 2018 (Amec Foster Wheeler, April 2018c), documenting the transition from former interwell analysis to intrawell analysis.

1.1 Background Groundwater Monitoring Program

The CCR Rule went into effect on October 19, 2015, and required the installation, certification and collection of eight independent groundwater samples from each well by October 17, 2017. Although the groundwater monitoring system contained the required number of wells in accordance with 40 CFR § 257.90, an additional well (CBL 341I) was installed late in 2016 and the only way to satisfy the requirement for eight samples by October 2017 was to institute monthly sampling.

Initial background groundwater quality data for wells CBL-301I, CBL-302I, CBL-306I, CBL-308I, and CBL-340I were obtained in 2016 and 2017. Quarterly monitoring is generally accepted for background because the samples are distinct and collected at times to account for seasonal variation. Background groundwater quality data for monitoring well CBL-341 were collected in 2017 at monthly intervals. Given the site hydrogeology data, monthly monitoring is believed to provide sufficiently distinct groundwater at this well. Groundwater flow velocity in the vicinity of CBL-341I averages approximately 50 feet per year, as calculated using the Eastern Transect gradients ranging from 41 to 72 feet per year, as reported in the Annual Groundwater Monitoring Reports (2017-2022). An average horizontal flow velocity of 50 feet per year is equivalent to 4 feet every 30 days, producing a unique water column between events. Groundwater flow rate is not a statistical test and not everything moves in the groundwater at the same speed. Because of this, the monitoring data from each well were

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Background Evaluation Report and

Statistical Analysis Plan Updated Cover Pages

LOWER COLORADO RIVER AUTHORITY

Austin, Texas

BACKGROUND EVALUATION REPORT
COMBUSTION BYPRODUCTS LANDFILL
FAYETTE POWER PROJECT
LA GRANGE, TEXAS

September 14, 2023

Bullock, Bennett & Associates, LLC
Engineering and Geoscience
Registrations: Engineering F-8542, Geoscience 50127
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LOWER COLORADO RIVER AUTHORITY
Austin, Texas

STATISTICAL ANALYSIS PLAN
COMBUSTION BYPRODUCTS LANDFILL
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