

December 10, 2019

Hillary Young, P.E.
Chief Engineer - Land Protection Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73162



DEC 10 2019

LAND PROTECTION DIVISION DEPT. OF ENVIRON. QLTY

Re:

Assessment Monitoring Plan

Evans and Associates Construction Co, Inc. / Big Fork Ranch Facility – Ponca City, OK

Dear Ms. Young:

Evans and Associates Construction Co., Inc. (Evans) notified the Oklahoma Department of Environmental Quality (ODEQ) on July 25, 2019 of potential statistical exceedances over background levels for some constituents listed in Appendix A of Oklahoma Administrative Code Chapter 517, Disposal of Coal Combustion Residuals from Electric Utilities (OAC 252:517). An Alternative Source Demonstration (ASD) was subsequently conducted and findings were provided to the ODEQ on September 26, 2019. From the ASD, the apparent exceedances appear to be attributable to the use of interwell methodology combined with natural variability between the monitoring wells. The ODEQ responded to the ASD in a letter dated November 5, 2019. From this letter, the ODEQ generally agrees with the findings of the ASD; with exception of the exceedances identified for boron. The ODEQ requested submittal of an assessment monitoring plan and initiation of assessment monitoring per OAC 252:517-9-6(b) and (d). This letter constitutes the Assessment Monitoring Plan. The Assessment Monitoring Program will be initiated upon approval of this plan by ODEQ and within 90 days of the date of the ODEQ letter; by February 3, 2020.

Evans will implement an Assessment Monitoring Program as described herein which will be conducted per OAC 252:519-9-6. The Assessment Monitoring Program will utilize the same monitoring wells specified in the current Detection Monitoring Program (GWMP-6A, GWMP-8A, GWMP-9A and GWMP-10A). Sampling and analytical procedures will be consistent with previous submittals already provided and approved by the ODEQ.

Evans proposes the following sampling as part of an Assessment Monitoring Program to meet the requirements of OAC 252:517-9-6(b) and (d).

1) Initial Assessment Monitoring Sampling Event: As per OAC 252:517-9-6(b), within 90 days of triggering the Assessment Monitoring Program, and annually thereafter, Evans will sample GWMP-6A, GWMP-8A, GWMP-9A and GWMP-10A and analyze groundwater for all constituents listed in OAC 252:517 Appendix A and Appendix B. Evans anticipates an initial assessment monitoring sample event in January 2020 (within 90 days of the November 5, 2019 DDEQ letter).

- 2) Second Assessment Monitoring Event: As per OAC 252:517-9-6(d), within 90 days of obtaining results from the initial assessment monitoring sampling event, and on at least a semiannual basis thereafter, Evans will resample GWMP-6A, GWMP-8A, GWMP-9A and GWMP-10A and conduct analysis for all parameters in OAC 252:517 Appendix A and for any of those parameters listed in OAC 252:517 Appendix B that were detected in any of these wells during the initial assessment monitoring sampling event (January 2020). Evans anticipates this monitoring sample event in April 2020.
- 3) Annual/Semiannual Assessment Monitoring Events: As per items one and two above, Evans will continue with annual and semiannual sampling of GWMP-6A, GWMP-8A, GWMP-9A and GWMP-10A. Evans anticipates assessment monitoring events to occur in October 2020 (within one year of the January 2020 event as per item one above / within six months of the April 2020 sampling event as per item two above) and in April and October of each subsequent year that assessment monitoring is ongoing.

Samples from October sampling events will be analyzed for all constituents listed in OAC 252:517 Appendix A and Appendix B.

Samples from April sampling events will be analyzed for all parameters listed in OAC 252:517 Appendix A and for those parameters listed in OAC 252:517 Appendix B that were detected in any of the monitoring system wells during the proceeding October sampling event.

Detections and concentrations from assessment monitoring will be recorded in the facility operating record as per OAC 252:517-9-6(d). If during any sampling event one or more constituents contained in OAC 252:517 Appendix B are detected at statistically significant levels above the groundwater protection standards (GWPS) as established in the 2018 Annual Groundwater and Corrective Action Report (Enviro Clean Cardinal, January 31, 2019), a notification of the exceedance(s) will be prepared and actions will be conducted as per OAC 252:517-9-6(g). In such an occurrence, an assessment of corrective measures will be initiated or a demonstration will be made that a source other than the CCR unit caused the contamination, or that increase resulted from error in sampling, analysis, statistical evaluation or natural variation in groundwater quality. The above sampling schedule will be adhered to unless an alternative sampling frequency is requested from and granted by ODEQ. As per OAC 252:517-9-6(e), a request to return to detection monitoring can be made to ODEQ if concentrations for all constituents listed in OAC 252:517 Appendix A and Appendix B are shown to be below background values for two consecutive sampling events.

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In addition to the assessment monitoring as proposed herein, Evans will continue at least quarterly with attempts to sample monitoring wells GWMP-11A, GWMP-12A and GWMP-13A for all constituents listed in OAC 252:517 Appendix A and Appendix B. Evans anticipates quarterly sampling in January, October, April and July of each year until data have been obtained to establish background or until permission is received from ODEQ to cease sampling efforts at these wells. These wells are frequently dry and unable to be sampled. At the time of this Assessment Monitoring Plan, data is available from three sampling events at GWMP-11A, from seven sample events at GWMP-12A and from one sample event at GWMP-13A. Once background sampling for these wells is complete (after eight sampling events have been successfully completed for each of these wells) and after background has been established the quarterly sampling will be discontinued and these wells may be incorporated into the groundwater monitoring system and sampled as part of the Assessment Monitoring Program.

Please notify me at 405-701-8215 or at Chris.Schaefer@altamira-us.com if you have any questions.

Sincerely,

Altamira-US, LLC

Chris Schaefer, F Hydrogeologist

Saeed Zahrai, P.E. / EMERA, Corp

CC: