



SCOTT A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT  
Governor

February 25, 2019

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Matthew E. Miller  
Staff Attorney, Sierra Club  
50 F Street NW, 8<sup>th</sup> Floor  
Washington, DC 20001

Re: Public Comments Regarding the Solid Waste Draft Permit for the Big Fork Ranch CCR Landfill

Dear Mr. Miller:

The Oklahoma Department of Environmental Quality (DEQ) received written comments from the Sierra Club, Waterkeeper Alliance, and LEAD Agency via electronic mail on November 26, 2018. The comments were concerning the Draft Permit issued on October 3, 2018 for the Big Fork Ranch CCR Landfill. Please find the enclosed response to the November 26, 2018 comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hillary Young', is written over a large, horizontal, oval-shaped scribble.

Handwritten initials 'HY' in black ink are written to the left of the typed name. Hillary Young, P.E.  
Chief Engineer  
Land Protection Division

HY

Enclosed: Response to Public Comments

cc: Johnson Grimm-Bridgwater, Sierra Club  
Larissa U. Liebmann, Waterkeeper Alliance



**Oklahoma Department of Environmental Quality  
Response to Public Comments  
Tier III Permit Application and Draft Permit  
Big Fork Ranch Coal Combustion Residuals Landfill  
Noble County**

February 25, 2019

The following includes written comments received by the Oklahoma Department of Environmental Quality on the Tier III Permit Application and Draft Permit for the Big Fork Ranch Existing Coal Combustion Residuals Landfill. A list of acronyms and a brief history has been provided to deliver clarification prior to the response to comments.

**List of Acronyms**

CCR – Coal Combustion Residuals  
DEQ – Oklahoma Department of Environmental Quality  
EPA – Environmental Protection Agency  
MCL – Maximum Contaminant Level  
NOD – Notice of Deficiency  
OAC – Oklahoma Administrative Code  
OG&E – Oklahoma Gas and Electric  
O.S. – Oklahoma Statutes  
SSI – Statistically Significant Increase

**History**

The Big Fork Ranch CCR Landfill (“Big Fork Ranch”) is an existing CCR landfill owned and operated by Evans and Associates Construction Company, Inc. (“Evans”). Big Fork Ranch was formerly operated under a non-coal mining permit issued by the Oklahoma Department of Mines. Big Fork Ranch receives fly ash and bottom ash produced by OG&E Sooner Generating Station in Red Rock, Oklahoma. On November 1, 2016, Title 45 O.S. § 940 was amended to remove a DEQ permit exemption for non-coal mining operations receiving fly ash, bottom ash, and other coal combustion materials for disposal. Evans entered into a consent order with DEQ to establish timeframes for complying with OAC 252:517 and submitting a permit application.

DEQ received the Tier III Permit Application on October 11, 2017 and determined the Application to be administratively complete on December 8, 2017. DEQ subsequently issued a technical NOD on March 13, 2018. A Response to NOD was submitted and received by DEQ on April 20, 2018, with supplemental information received on July 18, 2018 and August 16, 2018. The Application was determined to be technically complete with the Draft Permit issued on October 3, 2018. Legal notice of the Draft Permit was published in the *Perry Daily Journal* on October 23, 2018. The notice of Draft Permit provided a 30-day opportunity to comment on the Tier III Permit Application and Draft Permit and request a public meeting. Due to holidays, the comment period ended on November 26, 2018. No requests for a public meeting were received, but written comments were received on November 26, 2018.

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**Public Comments and DEQ Responses**

Public comments were submitted jointly by Sierra Club, Waterkeeper Alliance, and LEAD Agency (collectively the “Citizen Groups”) via electronic mail attachment on November 26, 2018. The following comments are excerpts from the submittal highlighting key topics with DEQ responses.

None of the comments identified a deficiency, error or omission from the draft permit. Several comments raised questions about the Oklahoma Solid Waste Statutes and/or CCR rules. The permit public comment period is confined to addressing draft permit deficiencies, errors or omissions. Therefore, with the exception of requiring Evans to make minor changes to maps provided in the application, DEQ will not be making any revisions to the draft permit.

**DEQ Website and Public Participation**

**Comment 1:** Counterintuitively and problematically, ODEQ’s online portal for submitting comments – <http://www.deq.state.ok.us/mainlinks/publicpermits.html> – apparently ceases to accept comments at 12:00 am on the morning that the comment period closes; by contrast, normally portals close at the end of the evening of the day listed as the deadline. This unorthodox convention could very well thwart members of the public from succeeding in leaving a comment on the last day of the period. In addition, the online portal does not support the uploading of attachments, which inhibits members of the public from submitting Word documents, PDFs, or other files—which are common, often necessary vehicles for public comments—short of calling ODEQ and figuring out whom to email. The Citizen Groups urge ODEQ to address both of these problematic and unusual shortcomings, each of which tends to undermine full and fair public participation.

DEQ Response: Thank you for bringing this to DEQ’s attention. The website has been updated to close comment periods at 11:59 pm of the closing date. DEQ will continue to update the website to make it more user-friendly. Additionally, DEQ provides multiple avenues for commenting on draft permits and applications, including submittal via hardcopy, telephone, or email.

**Federal CCR Rule**

**Comment 2:** It would be wasteful and imprudent for ODEQ now to finalize and issue state CCR permits, given the pendency of multiple concurrent regulatory and judicial proceedings that directly affect such permits’ shape and basic legitimacy. ODEQ should therefore decline to issue state CCR permits until the applicable legal framework has congealed. Alternatively, ODEQ should at

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least revise the Draft Permit to include an express reopener clause—requiring fresh public comment on, and regulatory re-examination of, Big Fork Ranch’s CCR permit following any material regulatory or judicial development concerning any federal or state law undergirding the permit.

DEQ Response: Oklahoma’s CCR program operates under existing state law and in lieu of federal law. While the federal program is in the midst of change, Oklahoma’s program is still in full force and effect. However, even though Oklahoma’s CCR program retains its validity apart from the federal program, the Oklahoma program is required to be updated when the federal program is made more stringent and facilities are required to modify their permits to incorporate changes made to the Oklahoma program. The draft permit for Big Fork Ranch contains a provision requiring Evans to apply for a permit modification when such application is required by OAC 252:4 and 517. See *Draft Permit, D. General Conditions, No. 2, Duty to Apply*.

Groundwater Monitoring

**Comment 3:** Groundwater monitoring at Big Fork Ranch demonstrates that coal ash contaminants are entering both local groundwater and, likely, the surface water of the Arkansas River. Groundwater monitoring results have revealed repeating high levels exceeding either maximum contaminant levels (“MCL”) or groundwater protection standards of coal ash contaminants in the groundwater, as applicable—including those for arsenic, cobalt, lead, lithium, boron, sulfate, and antimony. Evans only began assessment monitoring at Big Fork Ranch on January 6, 2018, thus limiting the scope of available groundwater monitoring data for many of the contaminants. Yet, testing has nonetheless demonstrated the following examples of coal ash contaminants entering groundwater at Big Fork Ranch at unsafe levels...

*Commenter proceeds to list groundwater concentrations of arsenic, cobalt, lead, lithium, boron, sulfate, and antimony as they compare to EPA MCLs and drinking water health advisories.*

These contaminants are also likely entering the Arkansas River. Maps submitted by Evans demonstrate that the groundwater under the Big Fork Ranch site flows directly to the river, while GWMP #10A—where many contaminants are being detected—is the farthest downgradient monitoring well.

DEQ Response: The determination that a release has occurred that may result in contamination of groundwater is not determined solely by constituent concentrations that

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exceed an MCL or drinking water health advisory. Rather, the process required by OAC 252:517 Subchapter 9 involves determining whether concentrations of Appendix A or B parameters represent a statistically significant increase (SSI) by comparing compliance points against a pool of background data. Assessment of corrective measures begins when there is an SSI of any Appendix B parameter over that parameter's groundwater protection standard, typically set at the applicable MCL.

If groundwater monitoring results indicate, at any time during the active life and post-closure period, that groundwater statistical exceedances have occurred, then the process of escalating monitoring and corrective action described in OAC 252:517-9-5 through 9-9 will be followed.

The application for Big Fork Ranch includes statistical procedures and a groundwater monitoring network sufficient to detect SSIs, which meet the regulatory requirements of OAC 252:517 Subchapter 9.

**Comment 4:** Furthermore, mapping provided in Evans' Big Fork Ranch CCR permit application suggests that coal ash may be saturated in groundwater at the site. For example, "Map 7A", the cross-section plot at the bottom right of the map shows "fly ash" that may be situated lower than the high and low water mark.

DEQ Response: According to the boring log for GWMP #10A in Appendix D of the application, fly ash was found to a depth of 3 feet below ground elevation and is underlain by brown clay. With an approximate ground elevation of 1023 feet (per Map MP-7A), this equates to a fly ash bottom elevation of 1020 feet. According to Map MP-9, the historic high groundwater elevation in GWMP #10A is approximately 999 feet. Given this information, it is estimated that 21 feet of separation exists between the bottom fly ash elevation and highest groundwater elevation at GWMP #10A.

For clarity, DEQ is requesting that the applicant revise Map MP-7A to clearly depict geological intervals and groundwater elevations on the cross section at GWMP #10A.

**Comment 5:** Under the Draft Permit, Big Fork Ranch's closure plan would allow coal ash to be left in place and covered. Groundwater monitoring results demonstrate, however, that the coal ash is leaching dangerous contaminants into groundwater at unsafe levels—contamination that would continue if the coal ash were left in place, especially if coal ash is in contact with groundwater. Therefore, no permit should be finalized without requiring that closure of the

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Big Fork Ranch landfill must entail removal of all coal ash and disposal in a lined landfill.

DEQ Response: Please see responses to Comments 3 and 4, which address the determination of groundwater statistical exceedances and separation from groundwater.

OAC 252:517-15-7 allows existing landfills to close by either removal of CCR or covering the landfill with final cover. According to OAC 252:517-15-7(d) and as outlined in Big Fork Ranch's Closure Plan, upon closure of the landfill, Evans must close the CCR unit(s) in a manner that will control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere. The application for Big Fork Ranch meets the regulatory requirements for closure in place.

**Comment 6:** Big Fork Ranch's application, in particular Map 7A, shows two different "low water" and "high water" points. This suggests that there may be two different aquifers under the site. In order to adequately monitor the groundwater impacts of the coal ash, Big Fork Ranch's groundwater monitoring plan should be designed so that it monitors water quality in all underlying geologic formations and/or aquifers underneath the site. Otherwise, contamination of the groundwater with CCR toxins could go undetected and would risk harming the Oklahomans who use it.

DEQ Response: The "low water" and "high water" points shown on map MP-7A reflect the groundwater fluctuations in the uppermost aquifer for the period from 2/20/2015 to 2/28/2016. In general, groundwater levels are expected to fluctuate over time and can vary by several feet. This is not indicative of separate aquifers. Regardless, OAC 252:517-9-2(a) specifically requires that the groundwater monitoring system yield samples from the uppermost aquifer.

For clarity, DEQ is requesting that the applicant revise Map MP-7A and MP-7B to specify the dates corresponding to the low water and high water levels.

Life Permits

**Comment 7:** The Draft Permit troublingly provides: "OAC 252:517-3-1 mandates the duration of this permit is for the life of the facility." Oklahoma's proposed new practice of granting permits "for life" is one reason many of the undersigned groups are challenging EPA's approval of Oklahoma's coal ash program in federal court, as noted above. The ongoing risks at Big Fork Ranch serve to illustrate the critical, commonsense point that it is imprudent and dangerous

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(besides legally infirm) to grant CCR disposal sites a permit for life, without requiring periodic re-examination and re-approval (as is the norm in other environmental regulatory programs).

DEQ Response: Oklahoma statutes at 27A O.S. § 2-10-301(D) require that solid waste permits be issued for the effective life of a given site. CCR permits are solid waste permits; therefore, CCR landfills such as Big Fork Ranch are subject to this statute. Facilities are required to apply to modify their permits when Oklahoma law changes. See response to Comment 2 for more details about permit modifications. The issuance of a permit is the beginning of the regulatory process, not the end of it.

The requirement that permits be issued for the effective life of a site has been in 27A O.S. 2-10-301(D) at least since March 21, 2001; therefore this is not a new requirement.

**Comment 8:** The risk of increased seismic activity at Big Fork Ranch may lead to a need to revisit and modify the permit in the future. Over the past decade, Noble County has experienced extraordinary increases in the frequency and severity of earthquakes, in connection with increased deep wastewater disposal. There remains a continued risk of severe seismic activity at Big Fork Ranch, and the risks of this kind of seismic activity have not been considered by Evans and are not contemplated in the Draft Permit. Granting Big Fork Ranch a CCR landfill permit for life prevents the public from reviewing and commenting on permit modifications that may be needed if seismic activity creates risks at Big Fork Ranch. This is just one of many reasons why a coal ash facility, with extensive environmental and health risks, should not be granted a lifetime solid waste permit.

DEQ Response: Please see the response to Comment 7 for a discussion of life permits. In accordance with OAC 252:517-13-5, the CCR landfill will be inspected yearly by a qualified professional engineer to identify any changes of geometry, potential structural weaknesses, or changes that may have affected the stability of the CCR landfill, which would include effects of seismicity. These yearly inspection reports are required to be posted to the facility's public CCR website, and DEQ is to be notified of any identified deficiencies and corrective measures. The application for Big Fork Ranch is in compliance with regulatory requirements related to seismicity.

**Comment 9:** The complicated hydrogeology at Big Fork Ranch underscores the need for continued public participation in evaluating the adequacy of any future revisions to important reports and plans. Maps provided as part of Evans' Big

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Fork Ranch CCR permit application suggest that aspects of the hydrogeology are potentially complicated or unknown, as noted above. Maps such as Map 7A suggest that water levels may be different levels throughout the site, and that the soil composition is unknown in some locations. If plans for monitoring, closure, post-closure, and corrective action need to be revised in the future to reflect new information, the public may not have a chance to comment on them. These documents and decisions could have widespread impacts on public health and environmental impacts. The public should have an opportunity to review and comment on such important developments modifications that affect their health, community, and environment.

DEQ Response: All applications are processed in accordance with 27A 2-14-101, *et. seq.* and the Tier classifications provided in OAC 252 Chapter 4. Public participation is required with Tier II and III applications. These classifications are consistent with all other Oklahoma solid waste disposal facilities.

If corrective action is needed per OAC 252:517-9-7, the procedure for assessment of corrective measures requires that a public meeting be held. Notice of the public meeting must be sent to potentially affected parties at least 30 calendar days prior.

In addition to opportunities for public participation during the permitting and corrective action processes, DEQ has a complaints process. The complaints program requires timely resolution of complaints and provides for mediation if parties are not satisfied with the outcome.

All submittals and DEQ responses are public documents and are available for review upon request. Further, plans and reports are readily available on Big Fork's publicly accessible CCR website.

The application has been processed in accordance with the requirements for public participation at 27A O.S. § 2-14-101, *et. seq.*

CCR Website

**Comment 10:** The Citizen Groups emphasize the importance of material information about Big Fork Ranch being timely and reasonably accessible to the public. As provided by the Draft Permit, Evans must continue to make all required documents available to the public by posting the information on a publicly accessible Internet site in accordance with OAC 252:517-19-3. Clear, intuitive public access to information such as the Groundwater Monitoring and Corrective Action report is vital to interested Oklahomans' awareness of, and

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engagement regarding, the health and environmental risks and impacts of Big Fork Ranch.

DEQ Response: OAC 252:517-19-3 requires Evans to maintain a publicly accessible CCR website. These requirements are sufficiently reflected in Big Fork's permit application and as conditions in the draft permit.

Nearby Landowners

**Comment 11:** The Big Fork Ranch CCR landfill constitutes a direct threat and source of ongoing harm to local Oklahomans, including Ponca Tribe members. The case of Casey Camp-Horinek, a Ponca Tribal Council member who lives about two miles southeast of Big Fork Ranch, is illustrative. Ms. Camp-Horinek and her family are exposed to coal ash pollution in a number of ways, have been deeply concerned about it, and expect regulators to protect them from unjust, undue harm.

The harms experienced by Ms. Camp-Horinek and her family include, for example, their exposed [sic] to coal ash dust. The trucks that carry coal ash from the Sooner plant up to Big Fork Ranch pass near Ms. Camp-Horinek's residence, and she has witnessed the dust blowing from those trucks towards her home. Her family has needed to change the filters for their air conditioning and heating system more and more frequently, and she has ceased gardening due to concerns about the settling CCR dust.

Additionally, they are exposed to CCR pollution in nearby surface waters. They are concerned about a pond at the Big Fork Ranch, for one, whose trout they used to fish and eat, but which they no longer do as a result of the perceived sickening of the fish. Further, her family is exposed to CCR pollution of the Arkansas River, which Big Fork Ranch abuts just a few miles upstream from Ms. Camp-Horinek's home, and where they used to fish, pick fruit, and forage for mushrooms. They no longer do so, given their concerns about the CCR contamination, and have similarly ceased hunting deer in the area.

Ms. Camp-Horinek is also concerned about CCR pollution of groundwater. The groundwater under and around her home is only about eight to twenty feet below the ground's surface. Her home, like many in the Marland community, has a well from which her family used to procure water for drinking and other household uses. However, due to concerns about CCR, her household has stopped drinking well water and instead has resorted to buying drinking water.

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Regrettably, neither Evans nor ODEQ's Draft Permit recognizes these harms, let alone takes adequate steps to mitigate and prevent them. This failure raises concerns about not only general vigilance and lawfulness, but also environmental justice, in view of the adverse effect on members of the Native American community. The Citizen Groups urge ODEQ to acknowledge these problems, to require adequate steps by Evans to address them, and to enhance ODEQ's engagement with the Ponca Tribe and the rest of the affected local community about CCR issues, now and into the future.

DEQ Response: OAC 252:517 includes provisions for fugitive dust control, stormwater run-on and run-off control, and groundwater monitoring and corrective action. Big Fork Ranch's permit application includes plans for these environmental controls and is in compliance with OAC 252:517. Additionally, yearly fugitive dust control reports for 2017 and 2018 noted that no citizen complaints were received during the respective monitoring periods at Big Fork Ranch.

Should any member of the public believe a facility is not in compliance with any permitting requirement, they may submit a complaint to DEQ. The DEQ complaints program requires investigation and the expedient resolution of complaints involving noncompliance with statutory, regulatory, and permitting requirements. In the event a complainant remains unsatisfied with the resolution of a complaint, mediation is available by statute.