

CCR PERMIT APPLICATION

COMPANY NAME:

EVANS & ASSOCIATES CONSTRUCTION CO., INC.

**3320 N. 14TH STREET
PONCA CITY, OK 74602**

FACILITY NAME:

BIG FORK RANCH

FACILITY LOCATION:

**PARTS OF SECTION 8, T24N, R3E,
NOBLE COUNTY, OKLAHOMA**

Submitted To:

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON
P. O. BOX 1677
OKLAHOMA CITY, OK 73101-1677
405-702-0100**

Prepared For:

**EVANS & ASSOCIATES CONSTRUCTION CO., INC.
3320 N. 14TH STREET
PONCA CITY, OK 74602
405-378-7400**

Prepared By:

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SEPTEMBER 2017



ENGINEERING • PERMITTING • ENVIRONMENTAL • WASTE MANAGEMENT • MINING • RECLAMATION
GEOLOGICAL INVESTIGATION • SEDIMENTATION • EROSION CONTROL • REGULATORY COMPLIANCE ASSISTANCE

September 13, 2017

Mr. Jeff Biddick, E.I.
Land Protection Division
Oklahoma Department of Environmental Quality
P. O. Box 1677
Oklahoma City, OK 73101-1677

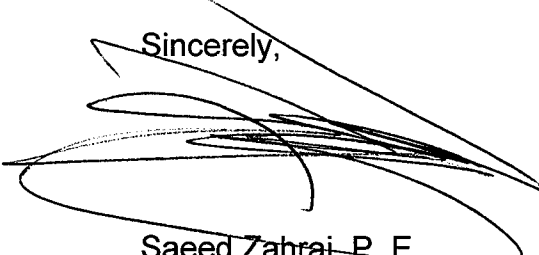
RE: Evans and Associates Construction Co., Inc., Big Fork Ranch Facility

Dear Mr. Biddick:

On behalf of Evans and Associates Construction Co., Inc. (EVANS), I submit three copies of the CCR Permit Application in compliance with the requirements of OAC 252:517 regarding Big Fork Ranch facility for your review and approval.

Please contact me at 405-557-0000 if you have any questions.

Sincerely,



Saeed Zahrai, P. E.
President
EMERA, Corp.

Enclosure

cc: Mr. Lee Evans, President

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EVANS & ASSOCIATES CONSTRUCTION CO., INC.

FACILITY NAME: BIG FORK RANCH

Coal Combustion Residuals (CCR) Permit Application

SUBCHAPTER 1 – GENERAL PROVISIONS

252:517-1-7 Permits Purpose of Application

This permit application applies to the Big Fork Ranch coal combustion residual (CCR) reclamation facility operated by Evans & Associates Construction Company, Inc. (EVANS). The Big Fork Ranch facility contains existing, active CCR reclamation, i.e. monofills, that are currently permitted by the Oklahoma department of Mines (ODM); but are not currently permitted by DEQ. It is expected that both CCR reclamation and beneficial reuse will occur at Ash Reclamation Cells 3 and 8.

SUBCHAPTER 3 – PERMIT PROVISIONS AND APPLICATIONS

PART 1 – GENERAL PROVISIONS

252:517-3-1 Duration of Permit

(a) Life of Site

This application applies to an existing CCR reclamation facility and will apply as long as it is in operation.

(b) Commencement of Construction and Operation

The Big Fork Ranch facility is an existing and active CCR reclamation, i.e. monofills, that is currently permitted by the Oklahoma department of Mines (ODM); but is are not currently permitted by DEQ.

(c) Cessation of Operations

If the active CCR unit ceases to accept CCR for 30 days or more without prior notice to DEQ, the facility is deemed to be in the process of final closure. Due to the nature of CCR landfill operation versus other landfill operations, not receiving CCR for 30 days or more does not constitute the facility to be in the process of final closure.

(d) Suspended Operations

The operation of this facility may be suspended provided prior written notice is submitted to DEQ. The suspension notice must be renewed annually.

If the site development or operations remain suspended for more than one year, the applicant shall perform closure and post-closure activities in accordance with the approved closure and post-closure plans, and Subchapter 15 of this Chapter.

The applicant shall post full financial assurance in accordance with Subchapter 17 of this Chapter and the approved cost estimates.

(e) Resuming Operation

Should the operation at this facility cease pursuant to (c) and (d) of this section, then prior to resuming the operation, the permit must be modified if, in the opinion of DEQ, the permit does not comply with all current applicable laws and regulations.

252:517-3-2 Permit Transfer

This application is for the operator, Evans & Associates Construction Co., Inc. (EVANS). At this time no permit transfer is anticipated.

252:517-3-3 General Requirements

This application is for an existing CCR facility that are not currently permitted by DEQ, but permitted by the Oklahoma Department of Mines. No DEQ solid waste permit is in effect.

252:517-3-4 Oath Required

The oath required by DEQ appears in Appendix A of this application.

252:517-3-5 Legal Right to Property

(a) Right of Access

EVANS leases the property within the boundary of Big Fork Ranch Facility from Kaw Land & Cattle Co., Inc., P. O. Box 30, Ponca City, OK 74602. A copy of the lease agreement appears in Appendix B of this application.

(b) Option for Use

EVANS already holds a lease on the property within the boundary of Big Fork Ranch Facility.

(c) Easement to DEQ

An easement granted to DEQ for the purpose of allowing DEQ or its contractor to access the facility for closure, post-closure monitoring or corrective action in the event of a default by EVANS appears in Appendix C.

252:517-3-6 Permit Applications

(a) New Applications

1) Operator:

Evans & Associates Construction Co., Inc., 3320 N. 14th Street, Ponca City, OK 74602;
Telephone (580) 765-6693.

2) Facility Name:

Big Fork Ranch, 3320 N. 14th Street, Ponca City, OK 74602;
Telephone (580) 765-6693. Street address is not assigned for the facility.

3) Disclosure Statement:

Not applicable, because this is an existing facility.

4) Legal Description:

NW/4 Section 8, Township 24 North, Range 3 East, Noble

County. No off-site borrow areas are proposed.

5) Permit Boundary Corners & Entrance Coordinates:

NE corner: 36° 34' 35.70" N / 97° 00' 32.91" W

SE corner: 36° 34' 28.56" N / 97° 00' 31.82" W

SW corner: 36° 34' 24.14" N / 97° 00' 52.83" W

NW corner: 36° 34' 37.48" N / 97° 00' 53.03" W

Entrance: 36° 34' 24.18" N / 97° 00' 52.83" W

6) Locality:

The Big Fork Ranch is approximately 8 miles east-northeast of Marland, OK.

7) Processing, Storage, and Disposal Operations

CCR arrives by bulk truck from the Oklahoma Gas & Electric Company Red Rock generating station. There is no CCR storage area, because incoming ash is promptly placed in the CCR cells. CCR processing is limited to application of water to control fugitive dust. The current and future CCR will be placed in existing developed Ash Reclamation Cells 3 and 8.

8) Access roads

Road surfacing material from on-site in addition to CCR is used to construct all-weather access road from the county road to the facility.

9) Production equipment

Front-end loaders, haul trucks, motor graders, and bulldozers are utilized to place incoming CCR into reclamation cells, and for removal for beneficial reuse.

10) Maps & Drawings

Maps and drawings required for this application are addressed at Part 3 below.

11) Data, Plans, & Specifications:

(A) Location Restrictions:

Addressed at Part 5 below.

(B) Operations Plan: The operations plan is described at Part 13 below.

(C) Stormwater Management: Stormwater management is described at Part 13 below.

(D) Facility Closure: The facility closure plan is addressed at Part 15 below.

(E) Aesthetic Enhancement: Addressed at 252:517-3-7 below.

12) Financial Assurance: Addressed at Subchapter 17 below.

(b) Information not Identified

Additional information will be submitted, when required by DEQ, to meet DEQ rules for protection of human health and the environment.

(c) Permit Modification Application

No modification to the existing operation is anticipated at this time.

252:517-3-7 Aesthetic Enhancement

The Big Fork Ranch is an existing CCR facility with no anticipated lateral expansion.

This section does not apply.

PART 3 – REQUIRED MAPS AND DRAWINGS

252:517-3-31 General Requirements

All maps and drawing are prepared in accordance with the requirements of this section.

Some of the drawing and maps are prepared utilizing larger scales than 1"=100' to depict the relevant surrounding configurations.

252:517-3-32 General Location Map:

The General County Map MP-1 shows the Big Fork Ranch facility on an ODOT Noble County base map (Appendix G).

252:517-3-33 Flood Plain Map

The Federal Emergency Management Agency (FEMA) Map (MP-2, Appendix G) shows the facility on a FIRM base map. The active part of the facility lies outside of the mapped flood-prone area along the Arkansas River.

252:517-3-34 Quadrangle Topographic Map

The Topographic Map (MP-3) shows the general location, hydrology and permit boundaries of the facility on a 7.5 minute U.S.G.S. quadrangle map base (MP-3, Appendix G).

252:517-3-35 Existing Contour Map

The Mining/Reclamation/CCR Reclamation Plan Map (MP-4) shows pre-construction contours, the general location, hydrology and permit boundaries (MP-4, Appendix G).

252:517-3-36 Site Map

The CCR Reclamation Plan Map (MP-4, Appendix G) shows the permit boundary and its dimensions, CCR receiving and reclamation cells, buffer zones, locations and elevations of monitoring wells, surface drainage structures, ponds, fences, pipelines and utility lines, access roads, CCR beneficial reuse/reclamation areas and on-site borrow areas.

252:517-3-37 Design Drawings

The CCR Reclamation Plan Map (MP-4, Appendix G) shows CCR receiving and reclamation areas, dikes and dams, drainage ditches and diversions, monitoring wells,

surface water detention structures and drainage directions. The drill logs and completion details of ground water monitoring wells and the design of the diversion channel/berms are included in Appendix D of this permit application.

252:517-3-38 Groundwater Resource and Usage Map

The Groundwater Resource Map (MP-5, Appendix G) shows private and public water supply wells, total depth, depth-to-water, and recharge areas within three miles of the Big Fork Ranch facility boundary.

252:517-3-39 Surface Geologic Map

The Geology Map (MP-6, Appendix G) shows surficial geology of the facility and the vicinity.

252:517-3-40 Highest Groundwater Contour Map

The highest historic observed groundwater elevations and locations of monitoring wells and top-of-well elevations appear on the Highest Groundwater Contour Map (MP-9, Appendix G).

252:517-3-41 Potentiometric Surface Map

The Potentiometric Surface Map (MP-8, Appendix G) shows the locations and highest average groundwater elevations over a 12-month monitoring period, and directions of groundwater flow (MP-8, Appendix G).

252:517-3-42 Site Specific Cross Sections

The Cross Section Map (MP-7, Appendix G) shows monitoring well logs, extent and thickness of stratigraphic units, lithology of strata, structural features, stratigraphic contacts, aquifers, fracture zones, producing zones of monitoring wells, existing groundwater elevations, strata on which CCR ash is placed and surface drainage structures, the existing ground surface, and the final cover.

252:517-3-43 Fill Cross Section Map

The Fill Cross Sections is incorporated with the Site Specific Cross Sections as presented on Cross Sections Map (MP-7, Appendix G).

252:517-3-44 Excavation Contour Map

Bottom contours of existing CCR cells appear on the Cross Sections Map (MP-7) and CCR Reclamation Plan Map (MP-4, Appendix G). There are only two small active cells receiving CCR for reclamation or to be utilized for beneficial reuse.

252:517-3-45 Top of Liner Contour Map

Top-of-liner contours and liner construction details are unavailable, because CCR reclamation was at an advanced stage before draft EPA and DEQ CCR rules were promulgated.

252:517-3-46 Completion Map

The final extent and expected final contours of CCR reclamation areas appear on the Final Closure Map (MP-10, Appendix G).

SUBCHAPTER 5 - LOCATION RESTRICTIONS

252:517-5-1 Placement Above the Uppermost Aquifer

(a) Applicability

The current operation is an existing facility. Therefore the requirement on location of CCR fills to be located more than five (5) feet above the uppermost aquifer does not apply. However, the Cross Section Map (MP-7) in Appendix G demonstrates CCR has been placed above the uppermost aquifer.

(b) Professional Engineer Certification

Professional Engineer certification regarding location restrictions is not required because this is an existing facility.

(c) Compliance Dates; DEQ Approval Required

As an existing CCR facility, compliance with the requirement that CCR is being disposed above the uppermost aquifer does not apply.

(d) Recordkeeping

The applicant will comply with the applicable recordkeeping requirements specified in OAC 252:517-19-1(e), the applicable notification requirements of OAC 252:517-19-2(e), and the applicable internet requirements of OAC 252:517-19-3(e).

252:517-5-2 Wetlands

(a) Applicability

The facility is an existing operation. Nonetheless, according to the U.S. Fish and Wildlife Service Wetlands Mapper website, the Big Fork Ranch facility does not contain nor encroach on mapped jurisdictional wetlands.

(b) Professional Engineer Certification

Because the Big Fork Ranch facility is an existing CCR unit, Oklahoma Professional Engineer Certification that the facility is not located in a wetland area not required.

(c) Compliance Dates; DEQ Approval Required

Not applicable.

(d) Recordkeeping

Not applicable.

252:517-5-3 Fault Areas

(a) Applicability

This section requires CCR units to be located within 200 feet of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this Section that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the CCR units.

The Big Fork Ranch facility is an existing operation. Nonetheless, the facility is located away from known recent faults, according to observations of reclamation cells walls and review of Oklahoma Geological Survey geologic maps.

(b) Professional Engineering Certification

Because the Big Fork Ranch facility is an existing CCR unit, Oklahoma Professional Engineer Certification that the facility is not located in near a fault zone is not required.

(c) Compliance Dates; DEQ Approval Required

Not applicable.

(d) Recordkeeping

Not applicable.

252:517-5-4 Seismic Impact Zones

(a) Applicability

The CCR reclamation cells, both active and inactive, do not contain unstable materials that would liquefy or otherwise shear or fail under horizontal seismic stress.

(b) Professional Engineering Certification

Because the Big Fork Ranch facility is an existing CCR unit, Oklahoma Professional Engineer Certification that the facility is not located in a seismic impact zone is not required.

(c) Compliance Dates; DEQ Approval Required

Not applicable.

(d) Recordkeeping

Not applicable.

252:517-5-5 Unstable Areas

(a) Applicability

The Big Fork Ranch facility is not located in a geologically unstable area. Considerations leading to this conclusion include evaluation of soil and subsoils that could cause differential settling, steep slopes, or man-made features, such as excavations or stockpiles subject to landslides or other mass-movement.

(b) Consideration

The applicant has considered the requirements of this section in determining the facility is not in an unstable area as described under (a) above.

(c) Professional Engineer Certification

Certification the Big Fork Ranch facility is not in an unstable area by an Oklahoma Registered Professional Engineer appears in Appendix E.

(d) Compliance Dates; DEQ Approval Required

The applicant is required to demonstrate the facility is not located on unstable area by October 17, 2018. The applicant has met this requirement.

(e) Recordkeeping

The applicant will comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the Internet requirements specified in OAC 252:517-19-3(e).

252:517-5-6 Scenic Rivers

(a) Prohibition

This facility is located approximately 450 feet south of the Arkansas River. The Arkansas River has not been designated as a Scenic River by the Oklahoma Scenic Rivers Commission.

(b) Exception

The applicant understands no area within the permit boundary of CCR units shall be located within the drainage basin of any river designated under the Oklahoma Scenic Rivers Commission Act. This restriction may be waived if the Scenic Rivers Commission that manages the affected river, or in the absence of such commission, the Oklahoma Tourism and Recreation Department, provides a statement that the proposed facility is not expected to adversely affect the river or any of the public purposes for which it was designated. Such statement shall be submitted to the DEQ.

252:517-5-7 Recreation / Preservation Areas

(a) Prohibition

The Big Fork Ranch facility is not located within 0.5 mile of a formally dedicated and managed for public recreation or natural preservation by a Federal, State, or local government agency.

(b) Exception

The above prohibition may be waived if the appropriate management agency provides a statement that the proposed facility is not expected to adversely affect the existing recreation or natural preservation area. Such statement shall be submitted to the DEQ.

252:517-5-8 Endangered or Threatened Species

For a new CCR unit, or expansion of the permit boundary of an existing CCR unit, a statement from the Oklahoma Department of Wildlife Conservation (ODWC) and from the Oklahoma Biological Survey (OBS), shall be submitted regarding current information about endangered or threatened wildlife or plant species listed in state and federal laws, that exist within one mile of the permit boundary or expansion area.

The Big Fork Ranch facility is an existing operation. Therefore, consultation with the Oklahoma Department of Wildlife Conservation or the Oklahoma Biological Survey is not required.

(1) Potential Impacts

Not applicable.

(2) Mitigation Plan required

Not applicable.

252:517-5-9 100-Year Floodplain

The Big Fork Ranch facility is located south of and outside the Arkansas River 100-year flood plain, per review of the FEMA Flood Insurance Map, Community Panel 4001320075A, published November 18, 1992. Please also refer to the FEMA Flood Plain Map (MP-2, Appendix G).

252:517-5-10 Public Water Supply

No new CCR unit or lateral expansion of a CCR unit shall be located within:

(1) one mile upgradient of an existing public water supply surface water intake, or one that is permitted for construction when a complete application has been filed with the DEQ; or

(2) a one year time of travel of a public water supply well. A wellhead delineation shall be performed and submitted to the DEQ if one has not already been performed.

There is no known public water supply intake or municipal water supply well within one mile of the Big Fork Ranch facility.

252:517-5-11 Wellhead Protection Area

A water well search conducted on the Oklahoma Water Resources Board website found no municipal water supply wells within two miles of the Big Fork Ranch facility.

SUBCHAPTER 7 – SUBSURFACE INVESTIGATION

PART 1 – GENERAL PROVISIONS

252:517-7-1 Applicability

(a) CCR Unit

The Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, EVANS requests a waiver from DEQ for the requirement for a subsurface investigation. The Big Fork Ranch facility contains existing, active CCR reclamation, i.e. monofills, that are currently permitted by the Oklahoma Department of Mines, but are not currently permitted by DEQ. It is expected that both CCR reclamation and beneficial reuse will occur at the remaining Ash Reclamation Cells 3 and 8.

(b) Part of Permit Application

Not applicable.

(c) Exception

Not applicable.

252:517-7-2 General

(a) Purpose and Design

Not applicable.

(b) Methods

Not applicable.

(c) Verification of Previously Submitted Data

Not applicable.

252:517-7-3 Compliance with OWRB Rules

All monitoring wells have and any future monitoring wells, borings, and/or piezometers will be constructed and/or plugged in accordance with the applicable requirements of OWRB at OAC 785:35.

(1) Flush Mounting Prohibited

Flush-mounting of monitoring wells and piezometers is prohibited.

(2) Multi-Zone Completions Prohibited

Multi-zone completions of monitoring wells and piezometers are prohibited.

(3) Notch

The applicant request DEQ's approval to utilize the ground surface next to the well casing for the point of measurement for groundwater elevation.

(4) Latitude, Longitude, and Surface Elevation

Latitude, longitude, and surface elevation, measured by a licensed surveyor, will be permanently marked on the protective casing of each monitoring well.

252:517-7-4 Drilling Plan

(a) Drilling Plan required

The Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. All drilling activities were in completed in 2000. For all future subsurface investigation, if any, a drilling plan meeting the requirements of this Section will be submitted to the DEQ for approval.

(b) Drilling Plan Content

The applicant will comply with the requirement of this section if additional drilling is required.

252:517-7-5 Drilling

(a) Notice of Intent to Drill

After DEQ approval of the drilling plan, if any, DEQ shall be provided with written notice of intent to drill at least two (2) weeks prior to initiating drilling.

(b) Drilling

Provided proper notification is given to the DEQ, drilling may proceed in accordance with the approved plan even if a representative of the DEQ is not present as scheduled.

(c) Qualified Groundwater Scientist

A qualified groundwater scientist shall supervise all drilling operations, if any

PART 3 – DATA COLLECTION

252:517-7-31 Data Collection

The Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, EVANS requests a waiver from DEQ for the requirement for a subsurface investigation. The Big Fork Ranch facility contains existing, active CCR reclamation, i.e. monofills, that are currently permitted by the Oklahoma Department of Mines, but are not currently permitted by DEQ. It is expected that both CCR reclamation and beneficial reuse will occur at the remaining Ash Reclamation Cells 3 and 8.

252:517-7-32 Borehole Logs

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable. The available drill logs and completion details of the existing ground water monitoring wells are included in Appendix D of this application.

252:517-7-33 Lithologic Sample Logs

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable. The available drill logs and completion details of the existing ground water monitoring wells are included in Appendix D of this application.

252:517-7-34 Geophysical Logs

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable. The available drill logs and completion details of the existing ground water monitoring wells are included in Appendix D of this application.

252:517-7-35 Soil and Rock Sampling

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-36 Soil Tests

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-37 Soil Report

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-38 Regional Hydrologic Study

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

PART 5 – GROUND WATER STUDY

252:517-7-51 General

(a) Groundwater Study Required

The Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, EVANS requests a waiver from DEQ for the requirement for a subsurface investigation. The Big Fork Ranch facility contains existing, active CCR reclamation, i.e. monofills, that are currently permitted by the Oklahoma Department of Mines, but are not currently permitted by DEQ. It is expected that both CCR reclamation and beneficial reuse will occur at the remaining Ash Reclamation Cells 3 and 8.

(b) As-Built drawings Required

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-52 Piezometers Required

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-53 Piezometer Details

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(a) Minimum number

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(b) Additional Piezometers

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(c) Piezometer Construction

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(1) Casing Material

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(2) Rigidity

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(3) Unconfined Aquifer

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(4) Confined Aquifer

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(5) Screen Length

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(d) Conversion of Piezometers to Monitoring Wells

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-54 Groundwater Elevation Measurements

(a) Groundwater/Waste Separation

The current operation is an existing facility. Therefore the requirement on location of CCR fills to be located more than five (5) feet above the uppermost aquifer does not apply. However, the Cross Section Map (MP-7, Appendix G) demonstrates CCR has been placed above the uppermost aquifer.

(b) Continuous Water Level Monitoring

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(c) Measurements after Heavy Rainfall

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(d) Method Defined

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-55 Area Rainfall

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(a) Rainfall Measurements

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(b) Average Rainfall

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

252:517-7-56 Shallow Saturated Zone Investigation

(a) Shallow Saturated Zones Encountered

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(b) Additional Shallow Zones Encountered

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

PART 7 – SURFACE PENETRATION PLUGGING

252:517-7-71 Plugging Requirements

(a) Boreholes

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(b) Piezometers and Monitoring Wells

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(c) Other Subsurface Penetrations

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(d) Casing Extraction

The casing of the monitoring wells will be extracted prior to plugging.

(1) Piezometers

There are no piezometers at this facility.

(2) Monitoring Wells

The protective bollards and concrete pad will be removed from all monitoring wells. The surface seal and well casing will be removed by perforating the bottom cap and filling the casing with appropriate plugging material as the casing is pulled from the borehole, or the casing may be extracted by over-drilling.

(e) Alternative

In areas where all or part of the well's casing and other components of the well cannot be removed and plugged in accordance with this Part, DEQ may allow the placement of a cement-bentonite grout inside the wells casing, from the bottom of the well to the ground surface. In this event, the owner/operator will demonstrate that the annular seal is adequately sealed and will submit documentation, prior to plugging the well, that demonstrates removal of all or part of the well's casing and other components.

SUBCHAPERT 9 – GROUNDWATER MONITORING/CORRECTIVE ACTION

252:517-9-1 General Provision

(a) Applicability

OAC 252:517-9-1 through OAC 252:517-9-9 is applicable to the Big Fork Facility.

(b) Initial Timeframes

(1) Existing CCR landfills and Existing CCR Surface Impoundments

The applicant has proposed three additional monitoring wells. These wells will be installed if required by DEQ.

(A) The installation of the groundwater monitoring system is described under section 252:517-9-2 of this application.

(B) The sampling and analysis program is provided under section 252:517-9-4 of this application.

(C) The detection monitoring program is described under section 252:517-9-5(b) of this application.

(D) The evaluation of the groundwater monitoring data for statistically significant increases over background levels is described under section 252:517-9-5 of this application.

(2) New CCR Landfills, New CCR Surface Impoundments, and all Lateral Expansions of CCR Units

As described above, the Big Fork Ranch is an existing CCR facility, whose activities are at an advanced stage. Therefore, this section is not applicable.

(c) Groundwater Monitoring and Corrective Action

The Groundwater monitoring system and groundwater monitoring program started at this facility in 2000. The applicant will conduct corrective action throughout the active life and post-closure care period of this facility, if necessary.

(d) Control Releases

In the event of a release from this facility, EVANS will immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. EVANS will comply with all applicable requirements in OAC 252:517-9-7, OAC 252:517-9-8, and OAC 252:517-9-9.

(e) Annual Groundwater Monitoring and Corrective Action Report

The initial annual groundwater monitoring and corrective action report will be placed on the Big Fork Ranch public operating record on or before January 31, 2018.

At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

- (1) A map, aerial image, or diagram showing the CCR units and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR units.
- (2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken.
- (3) In addition to all the monitoring data obtained under OAC 252:517-9-1 through OAC 252:517-9-9, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs.
- (4) A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels).
- (5) Other information required to be included in the annual report as specified in OAC 252:517-9-1 through OAC 252:517-9-9.

(f) Recordkeeping

EVANS will comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the internet requirements specified in OAC 252:517-19-3(h).

(g) DEQ Approval Required

The annual groundwater monitoring and corrective action report will be submitted to the DEQ for approval.

252:517-9-2 Groundwater Monitoring System

(a), (b), and (c) Performance Standard, Site-Specific Consideration, and Minimum Number

As an existing CCR facility, the Big Fork Ranch installed a groundwater monitoring system in 2000 in compliance with the requirements of the Oklahoma Department of Mines. Presently, the facility has, two (2) up-dip (background) monitoring wells identified as GWMP #6A and GWMP #8A, and two (2) down-dip (downgradient) monitoring wells, identified as GWMP #9A and GWMP #10A. These monitoring wells were completed to depths below the lowest CCR ash fill elevation, as illustrated in Cross Section Map (MP-9, Appendix G). These well were installed in 2000 and have been monitored twice a year.

One (1) additional up-dip monitoring well, identified as GWMP #11A, and two (2) additional down-dip monitoring wells, identified as GWMP #12A and GWMP #13A, are proposed and will be installed if required by DEQ. The locations of existing and proposed monitoring wells appear on the CCR Reclamation Plan Map (MP-4, Appendix G).

The additional groundwater monitoring systems, if required by DEQ, will be installed in accordance with the requirements of OAC 252:517-9-2, OAC 252:517-7-3, and OWRB at OAC 785:35.

(d) Multi-unit groundwater monitoring system

The existing groundwater monitoring system is designed to monitor Cell Nos. 3 and 8.

There is only one CCR unit at this facility.

(e) Monitoring Wells

All future monitoring wells, if any, will be constructed in accordance with OC 252:517-7-3. EVANS will document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, and other measurement, sampling, and analytical devices. The qualified professional engineer will be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (f) of this Section.

The monitoring wells, other measurement, sampling, and analytical devices will be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.

(f) PE Certification

The applicant will obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this Section. If the groundwater monitoring system includes the

minimum number of monitoring wells specified in paragraph (c)(1) of this Section, the certification must document the basis supporting this determination. This certification will be included in Appendix E of this application.

(g) DEQ Approval

The applicant will obtain DEQ's approval prior to installation of any future groundwater monitoring system.

(h) Recordkeeping

The applicant will comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the internet requirements specified in OAC 252:517-19-3(h).

252:517-9-4 Groundwater Sampling and Analysis Requirements

(a) DEQ Approval Required

EVANS is submitting the following groundwater monitoring program to obtain DEQ's approval. This plan includes information required by (b) through (j) of this Section.

(b) Sampling and Analysis Procedure

(1) Sample collection:

The initial depth-to-water, date, and time will be recorded. Next, a new, clean plastic bailer will be used to remove three (3) water columns of water before sampling. The water column height is calculated based on the measured height of water above the

well bottom. Then, the bailer is slowly lowered into the well to collect the sample to avoid sample agitation.

(2) Sample preservation and shipment:

Samples are directly poured from the bailer into new and clean sample bottles with the appropriate preservative specified by the laboratory for the parameter being tested. Samples will not be filtered in the field. After tightly sealing the sample bottle, it is immediately placed on ice in a cooler and delivered to a certified laboratory. The water Sampling preservation protocol is presented in Table 1 of this application.

(3) Analytical procedures:

The analytical laboratory uses standard U.S. Environmental Protection Agency procedures for each parameter tested.

(4) Chain-of-custody:

A chain-of-custody form provided by the analytical laboratory will be prepared, listing sample number, date, time, analytical parameter, sampler's name, signature and the date and time the samples were relinquished to the sample receiver at the laboratory. Any other parties who have custody of the sample must also enter their signature, date and time they receive and/or relinquished the samples.

(5) Quality assurance/quality control:

To prevent cross contamination between wells, the water level gauge will be decontaminated with Alconox™ detergent, followed by deionized water rinse.

Duplicate samples will be collected at a rate of one duplicate per ten samples, or at a minimum, one duplicate per sample event, whichever is less. Field measurements include depth-to-water, pH, temperature, conductivity, and dissolved oxygen. The pH meter will be calibrated with standardizing solutions 4, 7 and 10 before sampling, and will also be decontaminated with deionized water between samples. While certain sample hold times may be as long as 28 days, every effort will be made to transport samples to a certified laboratory the same day of collection.

(c) Sampling and Analysis Methods

The groundwater monitoring program included in this application includes sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples. For purposes of OAC 252:517-9-1 through OAC 252:517-9-9, the term constituent refers to both hazardous constituents and other monitoring parameters listed in either Appendix A or B of this Chapter.

(d) Groundwater Elevation

Groundwater elevations will be measured in each well immediately prior to purging, each time groundwater is sampled.

(e) Establish Background

The established background groundwater quality in a hydraulically upgradient or background well(s) for each of the constituents required in the particular groundwater

monitoring program that applies to the CCR unit is included under sections 252:517-9-5(a) or OAC 252:517-9-6(a) of this application.

(f) Number of Samples

The number of samples collected for conducting detection monitoring and assessment monitoring for downgradient and background wells will be in accordance with sections 252:517-9-5(a) and 252:517-9-6(a).

(g) Statistical Method

A control chart approach will be employed that allows for rapid visualization of deviations in concentrations of each parameter at each well. The control chart approach allows comparison of multiple chemical parameters on a single chart, and rapid visualization of statistically significant increases in chemical constituent concentrations.

PE Certification

EVANS will obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for Big Fork Ranch. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.

(h) Statistical Method Performance Standard

At this time, EVANS is proposing to utilize control chart approach to evaluate groundwater monitoring data. EVANS will comply with the requirements of Section 252:517-9-4(h).

Within 90 days after completing sampling and analysis, EVANS will determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.

(i) Reserved

(j) Filtering Prohibition

EVANS will measure "total recoverable metals" concentrations in measuring groundwater quality. Measurement of total recoverable metals captures both the particulate fraction and dissolved fraction of metals in natural waters. Groundwater samples will not be field- filtered prior to analysis.

(k) Recordkeeping

EVANS will comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

252:517-9-5 Detection Monitoring Program

(a) Detection Monitoring required

Samples will be collected semi-annually from background and downgradient wells and analyzed for the following constituents:

COMMON NAME	
Boron	pH
Calcium	Sulfate
Chloride	Total dissolved solids (TDS)
Fluoride	

(b) Monitoring Frequency

The monitoring frequency for the constituents listed above will be semiannual during the active life of the facility and the post-closure period. A minimum of eight (8) independent samples from each background and downgradient well will be collected and analyzed for the constituents listed above no later than October 17, 2017.

As of June 2017, twenty (21) samples from each of the monitoring wells have been collected, as required by this section.

(c) Number of Samples

The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent

with section 252:517-9-4(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well.

(d) Alternative Monitoring Frequency

None proposed at this time.

(e) Statistically Significant Increase

If EVANS determines, pursuant to OAC 252:517-9-4(h) that there is a statistically significant increase over background levels for one or more of the constituents listed in section 252:517-9-5(a) of this application at any monitoring well, EVANS will:

(1) Except as provided for in paragraph (e)(2) of this Section, within 90 days of detecting a Statistically significant increase over background levels for any constituent, establish an assessment monitoring program meeting the requirements of OAC 252:517-9-6, and have the assessment monitoring program approved by DEQ.

(2) EVANS may demonstrate that a source other than the Big Fork Ranch caused the Statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. EVANS will complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer verifying the accuracy of the information in the report. A report documenting

this demonstration shall be submitted to DEQ for approval. If a successful demonstration is completed within the 90-day period, EVANS may continue with a detection monitoring program under this Section. If a successful demonstration is not completed within the 90-day period, EVANS will initiate an assessment monitoring program as required under OAC 252:517-9-6. EVANS will also include the demonstration in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(3) EVANS shall prepare a notification stating that an assessment monitoring program has been established. EVANS has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(5).

(f) Recordkeeping

EVANS will comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

252:517-9-6 Assessment Monitoring Program

(a) Assessment Monitoring required

Assessment monitoring is required whenever a statistically significant increase over background levels has been detected for one or more of the constituents listed under section 252:517-9-5(a) of this application, detection monitoring requirements.

(b) Initiation and Number of Samples

Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator of the CCR unit must sample and analyze the groundwater for the constituents listed below. The number of samples collected and analyzed for each well during each sampling event must be consistent with OAC 252:517-9-4(f), and must account for any unique characteristics of the site, but must be at least one sample from each well.

COMMON NAME	
Antimony	Lead
Arsenic	Lithium
Barium	Mercury
Beryllium	Molybdenum
Cadmium	Selenium
Chromium	Thallium
Cobalt	Radium 226 and 228 Combined
Fluoride	

(c) Alternative Monitoring Frequency

None proposed at this time.

(d) Action Required

After obtaining the results from the initial and subsequent sampling events required in paragraph (b) of this Section, EVANS shall:

(1) Within 90 days of obtaining the results, and on a semiannual basis thereafter, resample all wells that were installed pursuant to the requirements of OAC 252-517-9-2, conduct analyses for all parameters under section 252:517-9-5(a) and for those constituents under 252:517-9-6(b) of this application that are detected in response to paragraph (b) of this Section, and record their concentrations in the facility operating record. The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with OAC 252:517-9-4(e), and must account for any unique characteristics of the site, but must be one sample from each background and downgradient well.

(2) Establish groundwater protection standards for all constituents detected pursuant to paragraph (b) or (d) of this Section. The groundwater protection standards must be established in accordance with paragraph (h) of this Section.

(3) Include the recorded concentrations required by paragraph (d)(1) of this Section, identify the background concentrations established under OAC 252:517-9-5(b), and identify the groundwater protection standards established under paragraph (d)(2) of this Section in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e).

(e) Concentrations Below Background

If the concentrations of all constituents listed under section 252:517-9-5(a) and for those constituents under section 252:517-9-6(b) are shown to be at or below background values, using the statistical procedures in OAC 252:517-9-4(g), for two consecutive sampling events, EVANS may return to detection monitoring of the CCR unit, with DEQ

approval. EVANS shall prepare a notification stating that detection monitoring is resuming for the facility. EVANS has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(7).

(f) Concentrations Above Background

If the concentrations of any constituent listed under section 252:517-9-5(a) and for those constituents under section 252:517-9-6(b) are above background values, but all concentrations are below the groundwater protection standard established under paragraph (h) of this Section, using the statistical procedures in OAC 252:517-9-4(g), EVANS shall continue assessment monitoring in accordance with this Section.

(g) Concentrations Above Groundwater Protection Standard

If one or more constituents listed under section 252:517-9-6(b) of this application are detected at statistically significant levels above the groundwater protection standard established under paragraph (h) of this Section in any sampling event, EVANS shall prepare a notification identifying the constituents listed under section 252:517-9-6(b) of this application that have exceeded the groundwater protection standard and submit to DEQ, a proposed plan and schedule for analyzing the environmental release from the facility and for developing appropriate corrective action. EVANS has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(8). EVANS shall:

(1) Characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected. The characterization must be sufficient

to support a complete and accurate assessment of the corrective measures necessary to effectively clean up all releases from the facility pursuant to Section 252:517-9-7 of this application. Characterization of the release includes the following minimum measures:

(A) Install additional monitoring wells necessary to define the contaminant plume(s).

(B) Collect data on the nature and estimated quantity of material released including specific information on the constituents listed under section 252:517-9-6(b) of this application and the levels at which they are present in the material released.

(C) Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with paragraph (d)(1) of this Section.

(D) Sample all wells in accordance with paragraph (d)(1) of this Section to characterize the nature and extent of the release.

(2) Notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with paragraph (g)(1) of this Section. The owner or operator has completed the notifications when they are placed in the facility's operating record as required by OAC 252:517-19-1(h)(8).

(3) Within 90 days of finding that any of the constituents listed under section 252:517-9-6(b) of this application have been detected at a statistically significant level exceeding the groundwater protection standards the owner or operator must either:

(A) Initiate an assessment of corrective measures as required by OAC 252:517-9-7; or

(B) Demonstrate that a source other than the Big Fork Ranch Facility caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions, must be certified to be accurate by a qualified professional engineer, and submitted to DEQ for approval. If a successful demonstration is made, EVANS shall continue monitoring in accordance with the assessment monitoring program pursuant to this Section, and upon DEQ approval may return to detection monitoring if the constituents listed under Sections 252:517-9-5(a) and 252:517-9-6(b) of this application are at or below background as specified in paragraph (e) of this Section. Evans will also include the demonstration in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(4) If a successful demonstration has not been made at the end of the 90 day period provided by paragraph (g)(3)(B) of this Section, EVANS will initiate the assessment of corrective measures requirements under Section 252:517-9-7.

(5) This section is not applicable to the Big Fork ranch facility. This section applies to existing unlined CCR surface impoundments as determined by OAC 252:517-11-2(a).

(h) Groundwater Protection Standard

EVANS will establish a groundwater protection standard for each constituent listed under Section 252:517-9-6(b) of this application detected in the groundwater. The groundwater protection standard will be:

(1) For constituents for which a maximum contaminant level (MCL) has been established under 40 CFR 141.62 and 141.66 (listed below), the MCL for that constituent.

COMMON NAME	MAXIMUM CONTAMINANT LEVEL (MCL), MG/L	COMMON NAME	MAXIMUM CONTAMINANT LEVEL (MCL), MG/L
Antimony	0.006	Lead	0.015 (Action Level)
Arsenic	0.010	Lithium	Not Determined
Barium	2.0	Mercury	0.002
Beryllium	0.004	Molybdenum	Not Determined
Cadmium	0.005	Selenium	0.05
Chromium	0.1	Thallium	0.002
Cobalt	Not Determined	Radium 226 and 228 Combined	5 pCi/L (pico Curies per liter)
Fluoride	4.0		

(2) For constituents for which an MCL has not been established, the background concentration for the constituent established from wells in accordance with OAC 252-517-9-2.

(3) For constituents for which the background level is higher than the MCL identified under paragraph (h)(1) of this Section, the background concentration.

(i) Recordkeeping

EVANS will comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

252:517-9-7 Assessment of Corrective Measures

(a) Assessment of Corrective Measures required

Within 90 days of finding that any constituent listed under Section 252:517-9-6(b) of this application has been detected at a statistically significant level exceeding the groundwater protection standard defined under Section 252:517-9-6(h), or immediately upon detection of a release from Big Fork Ranch facility, EVANS will initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions.

A proposed plan and schedule for analyzing the release from the facility into the environment and for developing appropriate corrective action will be submitted to DEQ. The assessment of corrective measures shall be completed within 90 days, unless EVANS demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances.

EVANS shall obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. EVANS shall also include the demonstration in the annual groundwater monitoring and corrective action

report required by Section OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(b) Continued Monitoring

EVANS shall continue to monitor groundwater in accordance with the assessment monitoring program as specified under Section 252:517-9-6.

(c) Effectiveness of Corrective Measures

The assessment under paragraph (a) of this Section shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under Section 252:517-9-8 addressing at least the following:

- (1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination.

- (2) The time required to begin and complete the remedy.

- (3) The institutional requirements, such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).

(d) DEQ Approved required

EVANS shall submit the completed assessment of the corrective measures to DEQ for approval and place the approved assessment in the facility's operating record. The assessment has been completed when it is placed in the facility's operating record as required by OAC 252:517-19-1(h)(10).

(e) Public Meeting

EVANS shall discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy, in a public meeting with interested and affected parties. The requirements of public notice are as follows:

(1) Public meeting required

Prior to the selection of a remedy, the results of the corrective measures assessment must be discussed in a public meeting.

(2) Mail notifications required

By certified mail, return receipt requested, notice of the public meeting shall be given at least 30 calendar days prior to the date of the meeting to the following:

(A) All persons who own the land or minerals or who reside on the land that directly overlies any part of the plume of contamination and within one year time of travel if contaminants have migrated off-site.

(B) Boards of County Commissioners, incorporated municipalities, rural water districts and conservation districts within a three-mile radius of the facility.

(C) Legal notice of the public meeting shall be published at least 10 calendar days prior to the date of the meeting in accordance with forms and instructions provided by DEQ.

(3) Copies to DEQ.

Prior to the public meeting, DEQ shall be provided with:

(A) An affidavit from the publisher (accompanied by a copy of the published notice), showing the date of publication.

(B) Copies of certified mail receipts for those persons identified in (b) of this Section.

(C) A cadastral (property ownership) map and a mineral ownership map covering the area within a two (2) mile radius of the facility.

(f) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

252:517-9-8 Selection of Remedy

(a) Remedy selection

Based on the results of the corrective measures assessment conducted under OAC 252:517-9-7, EVANS shall, as soon as feasible, select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this Section. This requirement applies to, not in place of, any applicable standards under the Occupational Safety and Health Act.

EVANS shall prepare, and submit to DEQ for approval, a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, EVANS shall prepare, and submit to DEQ for approval, a final report describing the selected remedy and how it meets the standards specified in paragraph (b) of this Section.

EVANS shall obtain a certification from a qualified professional engineer that the remedy selected meets the requirements of this Section. The report has been completed when it is placed in the operating record as required by OAC 252:517-19-1(h)(12).

(b) Remedy Requirements

The remedy must:

- (1) Be protective of human health and the environment.

(2) Attain the groundwater protection standard as specified pursuant to OAC 252:517-9-6(h).

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents listed under Section 252:517-9-6(b) of this application into the environment.

(4) Remove from the environment as much of the contaminated material that was released from the facility as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems.

(5) Comply with standards for management of wastes as specified in OAC 252:517-9-9(d).

(c) Evaluation Factors

In selecting a remedy that meets the standards of paragraph (b) of this Section, EVANS shall consider the following evaluation factors:

(1) The long and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(A) Magnitude of reduction of existing risks.

(B) Magnitude of residual risks in terms of likelihood of further releases due to CCR remaining following implementation of a remedy.

(C) The type and degree of long-term management required, including monitoring, operation, and maintenance.

(D) Short-term risks that might be posed to the community or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal of contaminant.

(E) Time until full protection is achieved.

(F) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment.

(G) Long-term reliability of the engineering and institutional controls.

(H) Potential need for replacement of the remedy.

(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

(A) The extent to which containment practices will reduce further releases.

(B) The extent to which treatment technologies may be used.

(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

(A) Degree of difficulty associated with constructing the technology.

(B) Expected operational reliability of the technologies.

(C) Need to coordinate with and obtain necessary approvals and permits from other agencies.

(D) Availability of necessary equipment and specialists.

(E) Available capacity and location of needed treatment, storage, and disposal services.

(4) The degree to which community concerns are addressed by a potential remedy(s).

(d) Schedule for Implementation and Completion

EVANS shall specify as a part of the selected remedy a schedule(s) for implementing and completing remedial activities. Such a schedule must require the completion of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (6) of this Section.

The schedule shall be submitted to DEQ for approval. EVANS shall consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination, as determined by the characterization required under OAC 252:517-9-6(g).

(2) Reasonable probabilities of remedial technologies in achieving compliance with the groundwater protection standards established under OAC 252:517-9-6(h) and other objectives of the remedy.

(3) Availability of treatment or disposal capacity for CCR managed during the implementation of the remedy.

(4) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy.

(5) Resource value of the aquifer including:

(A) Current and future uses.

(B) Proximity and withdrawal rate of users.

(C) Groundwater quantity and quality.

(D) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to CCR constituents.

(E) The hydrogeologic characteristics of the facility and surrounding land.

(F) The availability of alternative water supplies.

(6) Other relevant factors.

(e) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

252:517-9-9 Implementation of the Corrective Action

(a) Requirements

Within 90 days of selecting a remedy Section 252:517-9-8, EVANS shall initiate remedial activities. Based on the schedule established Section 252:517-9-8(d) for implementation and completion of remedial activities EVANS shall:

(1) Establish and implement a corrective action groundwater monitoring program that:

(A) At a minimum, meets the requirements of an assessment monitoring program under Section 252:517-9-6.

(B) Documents the effectiveness of the corrective action remedy.

(C) Demonstrates compliance with the groundwater protection standard pursuant to paragraph (c) of this Section.

(2) Implement the corrective action remedy selected under Section 252:517-9-8.

(3) Take any interim measures necessary to reduce the contaminants leaching from the facility, and/or potential exposures to human or ecological receptors. Interim measures must, to the greatest extent feasible, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to Section 252:517-9-8. The following factors must be considered by EVANS in determining whether interim measures are necessary:

(A) Time required to develop and implement a final remedy.

(B) Actual or potential exposure of nearby populations or environmental receptors to any of the constituents listed under Section 252:517-9-6(b) of this application.

(C) Actual or potential contamination of drinking water supplies or sensitive ecosystems.

(D) Further degradation of the groundwater that may occur if remedial action is not initiated expeditiously.

(E) Weather conditions that may cause any of the constituents listed under Section 252:517-9-6(b) of this application to migrate or be released.

(F) Potential for exposure to any of the constituents listed under Section 252:517-9-6(b) of this application as a result of an accident or failure of a container or handling system.

(G) Other situations that may pose threats to human health and the environment.

(b) Compliance not Achieved

If EVANS, determines, at any time, that compliance with the requirements of Section 252:517-9-8(b) is not being achieved through the remedy selected, EVANS shall provide a certification from a qualified groundwater scientist and submit proposed alternative methods for DEQ approval prior to implementing other methods or techniques that could feasibly achieve compliance with the requirements.

(c) Remedies Complete

Remedies selected pursuant to Section 252:517-9-8 shall be considered complete when:

(1) EVANS demonstrates compliance with the groundwater protection standards established under Section 252:517-9-6(h) has been achieved at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under Section 252-517-9-2.

(2) Compliance with the groundwater protection standards established under Section 252:517-9-6(h) has been achieved by demonstrating that concentrations of constituents listed under Section 252:517-9-6(b) of this application have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards under Sections 252:517-9-4(f) and (g).

(3) All actions required to complete the remedy have been satisfied.

(d) Compliance with RCRA

All CCR that are managed pursuant to a remedy required under Section 252:517-9-8, or an interim measure required under paragraph (a)(3) of this Section, shall be managed in a manner that complies with all applicable RCRA requirements.

(e) Certification of Completion

Upon completion of the remedy, EVANS shall prepare a notification stating that the remedy has been completed. EVANS shall obtain a certification from a qualified professional engineer attesting that the remedy has been completed in compliance with the requirements of paragraph (c) of this Section and submit to DEQ for approval. The report has been completed when it has been approved by DEQ and is placed in the operating record as required by OAC 252:517-19-1(h)(13).

(f) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

SUBCHAPTER 11 - DESIGN CRITERIA

The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

SUBCHAPTER 13 – OPERATIONAL REQUIREMENTS

252:517-13-1 Air Resources

(a) Minimizing Airborne CCR

EVANS has prepared the following fugitive dust control plan to effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR cells, roads, and other CCR management and material handling activities.

(b) CCR Fugitive Dust Control Plan

(1) Fugitive dust control measures, and (2) CCR Conditioning

Unloading and Conditioning

CCR ash unloading will be restricted to the designated active cells only. Water will be applied as CCR ash is unloaded into each CCR cell, when needed. After water application, the CCR is compacted by a bulldozer and/or other appropriate equipment. Upon water application, the CCR is rapidly hydrated, congealing into a cementitious solid. CCR unloading will occur on 2H:1V slopes or flatter. Due to rapid hardening of

the hydrated ash, daily and intermediate cover are unnecessary. The type of bulk trucks delivering ash to Big Fork Ranch facility are end-dump, belly-dump, and pneumatic. Water will be utilized to suppress dust during unloading when needed. Additional operational measures to control fugitive dust include reduced vehicle speed limit for haul trucks on unpaved roads and application of water on haul roads.

End-Dump Trucks

When end-dump trucks arrive with CCR, the CCR is end-dumped directly into or along the sides of the cells. When CCR is end-dumped along the sides of the cells, the CCR will be pushed into the cells with mobile equipment.

Belly-Dump Trucks

When belly-dump trucks arrive with CCR, the bottom gates of the trucks are opened over or along the sides of the CCR cells. When CCR is belly-dumped along the sides of the cells, the CCR will be pushed into the cells with mobile equipment.

Pneumatic Trucks

When pneumatic bulk trucks arrive with CCR, the discharge hose of the truck is used to place the CCR directly into cells.

(3) Citizen complaints

Citizen complaints will be logged with the date the complaint was received, description of corrective action taken, and the date corrective action was completed.

(4) Dust Control Plan Effectiveness

The effectiveness of this Plan will be reviewed by the Permittee/Operator at the end of each calendar year to determine whether it needs to be amended. Review criteria include observations by the facility personnel, the applicant's consultant, and an assessment of citizen complaints, if substantiated.

(5) Initial Fugitive Dust Control Plan

The first fugitive dust control plan was contained in Part 2 of the Non-Coal Permit Application submitted to the Oklahoma Department of Mines in May 1999. EVANS placed a fugitive dust control plan in compliance with Section 252:517-13 in its Big Fork Ranch public operating record on October 9, 2015, as required in Section 252:517-19-1(g)(1).

(6) Fugitive dust control plan amendments

This Plan will be amended when changes in CCR handling, unloading, or placement practices occur, or when citizen complaints, if substantiated, necessitate a change of CCR handling, unloading, or placement practices. The amended plan will be placed in the EVANS facility public operating record, as required in OAC 252:517-19-1(g)(1).

(7) PE Certification

This plan meets the requirements of CCR Fugitive Dust Control Plan described under Section 252:517-13-1 of this application. On October 9, 2015, EVANS obtained a certification from a qualified professional engineer that the initial fugitive dust control plan meets the requirement of this Section.

(8) DEQ Approved required

EVANS submitted the initial CCR fugitive dust control plan to DEQ for approval, on October 9, 2015.

(c) Annual CCR Fugitive Dust Control Report

The Annual CCR Fugitive Dust Control Report will be prepared no later than 14 months after the initial dust control plan is placed in the facility operating record. Subsequent Annual Reports will be prepared one (1) year following the previous report and include the following:

1. Actions taken to control CCR fugitive dust,
2. A record of citizen complaints received, and
3. Corrective actions taken

For purposes of this paragraph (c), EVANS has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(2).

(d) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

252:517-13-2 Run-on and Run-off Controls for CCR Cells

(a) Run-on/Run-off control Systems

The run-on control system consists of Berm/Channel Nos. 3 and 6, which are designed to divert the discharge from a 25-year, 24-hour storm event away from active CCR cells.

Runoff from a 25-year, 24-hour storm event will be contained within the active CCR cells.

(b) Run-off from Active Portion of CCR cell

Precipitation falling on the active CCR cells is contained within the cells, and is not discharged. A water balance demonstrating the active cells are non-discharging appears in Table 2, Appendix F of this application. Run-off from the active CCR cells shall be handled in accordance with the surface water requirements under Section 252:517-13-6.

(c) Run-on and Run-off Control System Plan

(1) Content of the plan

Run-on diversion berms were designed by a Registered Professional Engineer to withstand the flow volume and velocity of 25-year, 24-hour storm events without breaching or overtopping. The diversion berms designs appear in the Appendix D of this application.

Run-off is controlled by the CCR cells. The water balance demonstrating the active cells are non-discharging appears in Table 2, Appendix F of this application.

EVANS has completed the initial run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(3).

(2) Amendment of the plan

EVANS may amend the written run-on and runoff control system plan at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(g)(3). EVANS must amend the written run-on and run-off control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) Timeframes for preparing the initial plan

(A) Existing CCR landfills

The initial run-on and run-off control system plan was prepared prior to the required timeframe of October 17, 2016, when the facility was under the authority of the Oklahoma Department of Mines.

(B) New CCR landfills and any lateral expansion of a CCR landfill

This section is not applicable.

(4) Frequency for revising the plan

Evans shall prepare periodic run-on and run-off control system plans required by paragraph (c)(1) of this Section every five years. The date of completing the initial plan

is the basis for establishing the deadline to complete the first subsequent plan. EVANS may complete any required plan prior to the required deadline provided they place the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), EVANS has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(3).

(5) PE certification

EVANS shall obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this Section.

(6) DEQ approval required

EVANS shall submit the initial and periodic run-on and run-off control system plans, and any subsequent amendment of the plans, to the DEQ for approval.

(d) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

252:517-13-3 Hydrologic and Hydraulic Capacity Requirements for CCR Surface Impoundments

There are no CCR surface impoundments within this facility. This section does not apply.

252:517-13-4 Inspection Requirements for CCR Surface Impoundments

There are no CCR surface impoundments within this facility. This section does not apply.

252:517-13-5 Inspection Requirements for CCR Landfills

(a) Inspections by a Qualified Person

(1) Applicability

CCR Cell Nos. 3 and 8 are inspected weekly on an inspection log form to record observations of actual or potential structural weakness, or the potential to disrupt the safety or operation of the CCR cells. The weekly inspections will be:

(A) Conducted by a member of Big Fork Ranch facility supervisory staff, and

(B) Recorded in the Big Fork Ranch public operating record as required under OAC 252:517-19-1(g)(8).

(2) Timeframes

(A) Existing CCR Landfills

EVANS shall initiated the inspections required under paragraph (a) of this Section prior to the required deadline of October 19, 2015.

(B) New CCR Landfills

Big Fork Ranch is an existing facility, therefore, this section does not apply.

(b) Annual Inspections by a Qualified Professional Engineer

(1) Inspection Requirements

Annual inspections of active CCR cells will be conducted by a qualified Registered Professional Engineer. The inspection will address disposal cell design, construction, operation, and maintenance to determine what corrective actions, if any, is required.

The annual inspection report will consider both file searches and visual inspections.

The inspection will include a review of available information regarding the status and condition of the CCR cells, all files available in the operating record (e.g., the results of weekly inspections by a qualified person and results of previous annual inspections).

The visual inspection of the CCR cells includes identifying signs of distress or malfunction of the CCR cells.

(2) Inspection Report

The qualified Professional Engineer's annual CCR inspection report will document changes in CCR cells geometry, approximate volume of CCR in the cells, evidence of actual or potential structural weakness, any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR cells, and any other changes in the CCR cells since the previous inspection which may have affected the stability or operation of the CCR cells.

(3) Timeframes for Conducting the Initial Inspection

(A) Existing CCR landfills

EVANS completed the initial inspection required by paragraphs (b)(1) and (2) of this Section on January 14, 2016, prior to the deadline of January 19, 2016.

(B) New CCR Landfills and any Lateral Expansion of a CCR Landfill

Big Fork Ranch is an existing facility, therefore, this section does not apply.

(4) Frequency of Inspection

EVANS shall conduct the inspection required by paragraphs (b)(1) and (2) of this Section on an annual basis. For purposes of this Section, EVANS has completed the annual inspection when the inspection report has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(9).

(5) Deficiency Identified; Corrective Measures Taken

If a deficiency or release is identified during an inspection, EVANS shall remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(6) DEQ Notification

EVANS will notify DEQ with documentations of corrective measures if a deficiency is identified in item (5) above.

(c) Recordkeeping

EVANS shall comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

252:517-13-6 Discharges

(a) All CCR Cells

Discharges from the Big Fork Ranch CCR facility are addressed at Section 252:517-13-2 above.

(b) Stormwater Permit

EVANS will maintain a copy of the Stormwater Pollution Prevention Plan (SWPPP) and a General Permit for Stormwater Discharges Associated with Industrial Activities in the operating record. The SWPPP will include all on-site and off-site soil borrow areas of one (1) acre or more.

252:517-13-7 Leachate Collection System

The Big Fork Ranch CCR facility is an existing operation, and does not have a leachate collection system. This section does not apply.

SUBCHAPTER 15 – CLOSURE & POST-CLOSURE CARE

INTRODUCTION

This Closure and Post-Closure Plan applies to the Big Fork Ranch coal combustion residual (CCR) reclamation facility operated by Evans & Associates Construction Company, Inc. (EVANS). The Big Fork Ranch facility contains existing, active CCR reclamation, i.e. monofills, that are currently permitted by the Oklahoma Department of Mines, but are not currently permitted by DEQ. It is expected that both CCR reclamation and beneficial reuse will occur at Ash Reclamation Cells 3 and 8.

252:517-15-1 Performance Standard

EVANS will close the facility in accordance with the approved closure plan and in accordance with all applicable requirements. The closure of the facility will be in such manner as to minimize the need for further maintenance and controls and minimizes the post-closure release of CCR into the environment.

252:517-15-2 Final Closure Notification

EVANS will notify the DEQ Land Protection Division in writing before final closure of a CCR reclamation unit commences at the Big Fork Ranch facility.

252:517-15-3 Certification of Final Closure

(a) Certification Requirements

After Big Fork Ranch site closure, EVANS will submit a Certification of Final Closure to DEQ, containing the following elements:

1. Signature by the owner/operator.
2. A statement that the Big Fork Ranch facility was closed according to the permit, DEQ-approved closure plan, and the applicable DEQ regulations.
3. A closure report, with drawings, plans, and a description of how closure was performed.
4. A description of whether groundwater or surface water monitoring indicated elevated levels of any constituent was detected, and what corrective actions were taken.

(b) Final Closure Map

A Final Closure Map, Map MP-10, will be included in the Certification of Final Closure.

The Final Closure Map will show the following features:

1. Final contours of the entire site
2. Permit boundary and the boundaries of the CCR units
3. Groundwater monitoring well locations
4. Surface impoundments (no leachate management system is proposed for this facility).
5. Permanent surface drainage structures
6. Aesthetic enhancements
7. Any other relevant information

(c) Professional Engineer Certification

The Certification of Final Closure will be prepared by and sealed by a qualified Oklahoma Registered Professional Engineer.

252:517-15-4 DEQ Approval of Final Closure

EVANS will obtain the approval of DEQ for the final closure of the Big Fork Ranch facility before the Post-Closure Period commences.

DEQ may extend the closure period and require additional financial assurance if:

1. Any testing shows the confirmed presence of elevated levels of any constituent
2. Any evidence of contamination related to the site operations
3. Final closure of the site is found to be inadequate

252:517-15-5 Inactive CCR Impoundments

There are no current or expected future CCR impoundments at the Big Fork Ranch facility. This section does not apply.

252:517-15-6 Closure or Retrofit of CCR Units

(a & b) Existing Unlined CCR and CCR Surface Impoundments

CCR had already been placed in the remaining Cell Nos. 3 and 8 prior to the effective date of the CCR rules. There are no CCR surface impoundments at the Big Fork Ranch facility. This section does not apply.

(c) New CCR Surface Impoundments

No new CCR surface impoundments are planned at the Big Fork Ranch facility. This section does not apply.

(d) Existing CCR Landfills

The Big Fork Ranch CCR facility is in compliance with applicable sections of the location restrictions at Part 252:517-5. Therefore, closure under Part 252:517-15-6(d)(1) is not required.

252:517-15-7 Criteria for Conducting the Closure or Retrofit of CCR Units

(a) Closure of CCR Unit

Closure of a CCR unit or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described below.

(b)(1)(A and B) CCR Unit Closure Plan

Existing CCR reclamation cells at the EVANS facility will be closed when no ash product is received or ash product removed from the facility for the beneficial reuse.

(b)(1)(C) CCR Unit Final Cover

At the end of CCR reclamation at this facility, remaining CCR that is unsold will be covered with a minimum of two (2) feet of final cover material excavated from the borrow area on-site. The top layer of the final cover will consist of a minimum of six (6) inches of earthen material capable of sustaining vegetative growth. The bottom layer of

the cover will consist of eighteen (18) inches of earthen material. The lower layer will be placed in nine (9) inch layers and compacted between layers. The lower 18 inches of cover will be tested in the field to verify it has a permeability not exceeding 1×10^{-5} cm/sec.

(b)(1)(D) CCR Unit In-Place Closure

EVANS will provide DEQ with an inventory of residual CCR to be left in-place and the areal extent of residual CCR requiring final cover.

(b)(1)(E) CCR Left In-Place

The largest area of CCR cell requiring final cover, at any given time, will not exceed 6.3 acres.

(b)(1)(F) CCR Unit Closure Schedule

The applicant anticipates placement of the final cover system over the CCR cell within 30 days of receiving the final shipment of the ash product or removal of beneficial reuse, whichever occurs last. The topsoiled areas will be revegetated according to the following schedule within the required timeframe of 180 days.

Table 3, Appendix F, presents the species, seeding or planting rates, dates, and methods to be used to revegetate all topsoiled areas. The species listed on this table will be established on the topsoiled areas alone or as a mixture.

After topsoil has been redistributed, leveled, and smoothed, soil samples will be

collected, from those areas that could be revegetated, and analyzed to determine the nutrient and lime deficiencies. Soil samples will be analyzed for pH, buffer index, nitrogen, phosphorus, and potassium. Any deficiencies will be corrected, according to Natural Resources Conservation Service recommendations, based on the results of the analysis, before permanent seeding takes place. Lime and fertilizer will be broadcasted over the topsoiled areas. However, it is preferable to place fertilizer in the rows at the time of seeding or planting, if possible. Other than customary soil preparation, nutrient and lime application, no other soil remediation will be performed to make the soil suitable and capable for revegetation.

After fertilizing is completed, the topsoil will be disked to a depth of 6 inches to provide a smooth and firm bed suitable for seeding. The disking operation will be performed along the contour. A cultipacker or harrow will be used to firm the soil, when needed. Seedbed preparation should be conducted within 24 hours preceding the seeding. This will ensure (a) a suitable seedbed for planting and seeding, and (b) that the topsoiled area will not be left unvegetated and plowed up (disked) for a prolonged period of time.

When seeding of the permanent species is not feasible due to climatic or biological conditions, temporary species (listed in Table 3) will be broadcasted as in situ mulch in order to provide a quick vegetative cover. Wheat straw or improved pasture grasses hay will be used as mulch material. The hay mulch will be applied in a uniform thickness at the rate of 2.5 tons per acre on the topsoiled and revegetated areas which are susceptible to erosion. Mulch will be applied by a hay blower or by hand. Mulch will

be anchored, when necessary, by treading or cutting the hay into the soil 2 to 3 inches deep on the contour at less than 8-inch spacing. A bulldozer or disk will be used to crimp the mulch into the topsoil.

A Closure Schedule will be submitted to DEQ providing estimated completion dates for each phase of CCR unit closure.

(b)(2) Timeframes for Preparing the Initial Closure Plan

The initial closure plan for existing CCR cells appears at Part 252:517-15-7 of this application.

(b)(3) Amendment of the Written Closure Plan

The applicant does not have any amendment to the closure plan at this time.

(c) Closure by CCR Removal

Existing CCR reclamation cells at the Big Fork Ranch facility will be closed when no ash product is received or ash product removed from the facility for the beneficial reuse.

(d) Closure Performance Standard when Leaving CCR in Place

(1) Closure Standard

EVANS will ensure the CCR unit is closed in a manner that will:

(A) Infiltration and Leachate Prevention

The lower eighteen (18) inches of the final cover will consist of earthen material, emplaced in six (6) inch layers and compacted between layers. After placement, the lower 18 inches of cover will be field-tested to verify its permeability does not exceed 1×10^{-5} cm/sec to minimize precipitation infiltration and formation of leachate.

(B) Ponding/Impoundment Prevention

The final cover will be graded to a uniform slope of approximately two percent (2%), without depressions and compacted to prevent ponding of rainfall over the CCR fill, and to minimize precipitation infiltration and erosion that might expose CCR to rainfall.

(C) Slope Stability and Erosion

Grading the final cover to slopes less than 4H:1V is expected to assure slope stability and prevent potential mass movement. Establishment of permanent vegetative cover will be the principal means of preventing erosion. The vegetative cover will consist of a seeding mixture of Common Lespedeza, Bermuda grass, and Perennial Ryegrass. The specific seeding rate will be determined in consultation with the OSU Noble County Cooperative Extension Service. Soil testing and application of soil amendments, if required, will be conducted in consultation with the Noble County Cooperative Extension Service.

(D) Maintenance Reduction

Establishment of permanent vegetative cover will be the long-term measure to reduce long-term maintenance of the final cover.

(E) Expedited Activities

All activities will be implemented as expeditiously as possible to close the CCR unit.

(2) CCR Impoundments

Not applicable. No CCR impoundments exist or are planned for this facility.

252:517-15-7(d)(3) Final Cover System

(A) Final Cover System

CCR landfills to be closed in-place will be covered with a composite final cover. The upper layer of the final cover will consist of six (6) inches of earthen material capable of supporting permanent vegetation. The lower layer will be a minimum of eighteen (18) inches of earthen material with a permeability no greater than 1×10^{-5} cm/sec to minimize rainfall infiltration. Settling and subsidence of the final cover will be minimized by placing the cover material in nine (9) inch layers and compacting, before the next layer is emplaced.

(B) Alternative Final Cover System

The applicant is not proposing any alternative final cover system.

(C) Final Cover Certification

The final cover system design will be certified by a qualified Oklahoma Registered Professional Engineer that the cover meets the requirements of Section 252:517-15-7.

252:517-15-7(e) Initiation of Closure Activities

EVANS will commence closure of a CCR unit within thirty (30) days after receipt of the known *final* CCR, or when the known *final* CCR has been removed from a CCR unit for beneficial reuse.

EVANS will commence closure of a CCR unit that has not received CCR or is no longer removing CCR for the purpose of beneficial use within two (2) years of the *last* receipt of CCR or within two (2) years of the *last* removal of CCR for the purpose of beneficial use.

EVANS may, depending on operating conditions and market demand, request an additional two (2) years to commence closure if it reasonably expects to receive future CCR shipments or continue CCR removal for beneficial reuse, per DEQ rules at 252:517-15-7(e)(2). EVANS' request for an extension will be supported by documentation that CCR delivery or removal will resume in the near future.

252:517-15-7(f)(1 and 2) Closure Activities Completion

EVANS will complete the closure activities of a CCR unit within six (6) months of commencement of closure, unless delayed by weather conditions or factors beyond the control of EVANS. Should such conditions arise, EVANS will request a one (1) year extension of time to complete CCR unit closure per 252:517-15-7(f)(2)(B). The request for extension will include a certification statement to the effect that the closure was delayed by circumstances beyond EVANS control. EVANS understands no more than two (2) one-year extensions may be obtained for any CCR facility.

252:517-15-7(f)(3) Closure Certification

EVANS will provide a certification from a qualified Oklahoma Registered Professional Engineer that the CCR unit was closed in compliance with the closure plan described in Part 252:517-15-7(b).

252:517-15-7(g) Intent to Close Notification

EVANS will place a notification of intent to close its CCR unit in its Big Fork Ranch facility's operating record (as required by 252:517-19-1(i)(7)), no later than the date EVANS initiates the closure of a CCR unit. The notification will include a statement that a qualified Registered Profession Engineer certifies the final cover design meets DEQ requirements at 252:517-15-7(d)(3)(iii).

252:517-15-7(h) Closure Notification

Within 30 days of the closure completion of a CCR unit, EVANS will place a notification in its facility's operating record (as required by 252:517-19-1(i)(8)) that a CCR unit has been closed. The notification will include a certification by a qualified Oklahoma Registered Professional Engineer as required by OAC 252:517-15-7(f)(3).

252:517-15-7(i) Deed Notation

The deed to the Big Fork Ranch facility will be modified to include a statement to the effect that: 1) the property was used as a CCR unit, and 2) the property is subject to post-closure care requirements as provided by OAC 252:517-15-9(d)(1)(iii). Within thirty (30) days of recording the deed notification with the County, a statement that the

deed was modified will be placed in the Big Fork Ranch operating record as required by 252:517-19-1(i)(9).

252:517-15-7(j) Recordkeeping

EVANS will maintain the required records for a period of five (5) years for each incident, measurement, surface and groundwater monitoring, maintenance, record, report, designs, study, closure, post-closure care, financial assurance, and corrective action, in compliance with OAC 252:517-19-1(i), OAC 252:517-19-2(i), and OAC 252:517-19-3(i).

Record Keeping - DEQ Notification

DEQ will be notified within 30 days of placing any required notification in the Big Fork Ranch operating record, in compliance with OAC 252:517-19-2.

Record Keeping – Publicly Accessible Internet Site

In compliance with OAC 252:517-19-3, the Big Fork Ranch facility on-line public operating record, titled “CCR Rule Compliance Data and Information” will be maintained for a period of five (5) years after posting of initial notifications. In general, notifications will be posted on the Big Fork Ranch on-line public operating record within thirty (30) days of placing the pertinent information required by OAC 252:517-19-1 in the operating record.

252:517-15-7(k) CCR Surface Impoundment Retrofit

This section does not apply. There are no CCR surface impoundments at the site, and none are planned.

252:517-15-8 Alternative Closure Requirements

EVANS may request an extension of time for Big Fork Ranch facility closure, and continue receiving CCR if a lack of alternative CCR disposal capacity exists, due to efforts by EVANS to procure additional CCR capacity. Once alternative disposal capacity is ready, the site CCR unit closure will commence.

252:517-15-9 Post-Closure Care Requirements

(a) Applicability

This section applies to Big Fork Ranch facility as they are subject to the closure criteria under OAC 252:517-15-7.

(b) Post-Closure Care Maintenance Requirements

(1) Final Cover

Following final closure of a CCR unit, EVANS will maintain the final cover by conducting repairs to correct effects of erosion, vegetative failure, and preventing effects of run-off and run-on.

(2) Leachate Collection System

The Big Fork Ranch facility is an existing facility which was not required to have any leachate system.

(3) Groundwater Monitoring

Following final closure, EVANS will maintain and monitor the groundwater in accordance with OAC 252:517-9-1 through OAC 252:517-9-9. This includes collection

and analysis of groundwater samples, maintenance of samples, quality control/quality assurance, statistical analysis of groundwater data, preparation of annual groundwater monitoring reports, and posting the information in the facility operating records and on on-line public record.

(c) Post-Closure Care Period

EVANS will, in general, maintain post-closure care for a period of thirty (30) years after final site closure, provided the Big Fork Ranch facility is under detection monitoring. If at the end of the post-closure care period, the CCR unit is operating under assessment monitoring in accordance with OAC 252:517-9-6, EVANS shall continue to conduct post-closure care until the facility returns to detection monitoring in accordance with OAC 252:517-9-6.

DEQ may extend the post-closure monitoring and care period if:

- (A) Sampling shows the presence of elevated levels of any constituent;
- (B) Evidence on contamination resulting from site operations is found to exist;
- (C) Prior maintenance or monitoring of the site is found to be inadequate;
- (D) The site is producing leachate that must be treated prior to discharge;
- (E) If other conditions are present that indicate a need for additional post-closure monitoring and care.

When post-closure period is extended, DEQ may require the maintenance of existing financial assurance, the posting of additional assurance, and/or may require corrective action.

252:517-15-9(d) Written Post-Closure Plan

(1) Content of the Plan

The following post-closure plan is prepared in accordance with OAC 252:517-15-9(d)(1)(A) through (C):

(A) Monitoring and Maintenance Plan

EVANS will continue maintenance of the final cover by conducting repairs to correct effects of erosion, and preventing effects of run-off and run-on. Groundwater monitoring will continue, which will consist of monitoring well sample collection and analysis, continuation of the sample quality control/quality assurance program, statistical analysis of groundwater data, and preparation of annual groundwater monitoring reports.

(B) Contact Information

EVANS contact information, as of February 11, 2017, is:

Evans & Associates Construction Co., Inc.

3320 N. 14th Street

Ponca City, OK 74602

Telephone: (580)765-6693

(C) Post-Closure Planned Land Uses

EVANS is the owner of the property where Big Fork Ranch facility is located. It is anticipated that after establishment of a permanent vegetative cover, the property will revert to pastureland for cattle ranching. The post-closure use of the property shall not disturb the integrity of the final cover or any other component of the containment

system, or the function of the monitoring systems, unless necessary to comply with the applicable requirements. Disturbances may be allowed up on approval by DEQ.

(2) Deadline to Prepare Initial Written Post-Closure Plan

(A) Existing CCR Landfills and CCR Surface Impoundments

For existing CCR units such as Big Fork Ranch facility, the initial written Post-Closure plan shall be submitted no later than the date specified by DEQ.

(B) New CCR Landfills, New CCR Surface Impoundments, and any Lateral Expansion

This section does not apply. The Big Fork Ranch facility is an existing facility.

(C) Completion

The Big Fork Ranch Post-Closure Plan will be complete when the following steps are completed:

1. It is entered into the public on-line operating record.
2. The Post-Closure Plan has been certified by an Oklahoma Registered Professional Engineer as required by OAC 252:517-15-9(d)(4).
3. DEQ approval of the Post-Closure Plan has been granted as required by 252:517-15-9(d)(5).

(3) Amendment of a Written Post-Closure Plan

EVANS will obtain approval from DEQ prior to any modifications to the approved Post-Closure Plan.

252:517-15-15-9(e) Notification of Completion of Post-Closure Care Period

EVANS will notify DEQ that post-closure care has been completed with 60 days of completion of work, and will place a copy of this notification in its operating record as required by OAC 252:517-19-1(i)(13). The notification shall include the certification by a qualified Oklahoma Registered Professional Engineer verifying the post-closure care has been completed in accordance with the approved closure plan.

252:517-15-15-9(f) Recordkeeping

EVANS will maintain the required records for a period of five (5) years for each incident, measurement, surface and groundwater monitoring, maintenance, record, report, designs, study, closure, post-closure care, financial assurance, and corrective action, in compliance with OAC 252:517-19-1(i), OAC 252:517-19-2(i), and OAC 252:517-19-3(i).

252:517-15-10 Post-Closure Use of Property

EVANS is the owner of the site and will assume responsibility for maintenance and monitoring of the property during the post-closure period. No other use of the property will be allowed during the post-closure period unless it is approved by DEQ. As such, EVANS will have control over ultimate use of the property after the post-closure care period ends, which is proposed to be pastureland.

The post-closure use of the property shall not disturb the integrity of the final cover or any other component of the containment system, or the function of the monitoring systems.

EVANS shall not allow any other use of the property during the post-closure period unless it is approved by DEQ.

252:517-15-11 Post-Closure Performance Certification

Certification that post-closure care was completed according to the DEQ-approved post-closure plan, the DEQ permit, and applicable DEQ regulations will be prepared by a qualified Oklahoma Registered Professional Engineer. The post-closure certification will also indicate whether groundwater monitoring revealed elevated levels of contaminants and, if so, what corrective actions were taken. The certification will be submitted to DEQ and placed on the Big Fork Ranch public record website at the end of the post-closure period.

252:517-15-12 Land Use Restrictions

EVANS will place a note on the property title warning future purchasers of the property of the presence of CCR and its potential impact on subsurface activity at the property.

Any person contemplating using the CCR area shall ascertain the depth of the CCR unit and the operating history of the site and shall avoid any activities that may pose increased threat to the human health and safety or the environment. Pilings or

foundation should not disturb or penetrate the final cover and/or bottom liner. Utilities and pipelines shall be routed around the CCR area.

SUBCHAPTER 17 – COST ESTIMATES & FINANCIAL ASSURANCE

PART 1- GENERAL PROVISIONS

252:517-17-1. Applicability

This section is applicable to all CCR cells.

252:517-17-2. Effective date

(a) Closure and post-closure care

EVANS has submitted the financial assurance for closure and postclosure care to DEQ for approval.

(b) Corrective action

DEQ approved financial assurance for corrective action shall be established no later than 120 days after the corrective action remedy has been selected in accordance with OAC 252:517-9-8, or an alternative corrective action plan has been approved.

(c) Permit modifications

DEQ approved financial assurance must be established and appropriately funded before the DEQ will issue a permit modification that results in an increase in closure or post- closure cost estimates.

252:517-17-3 Duty to Maintain Financial Assurance

In compliance with Subchapter of 17 of Part 517, the applicant will maintain performance bond to cover closure and post-closure care until release of the facility from DEQ permit coverage. The amount of financial assurance will be the cost of hiring third party to close the Big Fork Ranch CCR facility at the point of maximum financial liability. The closure and post-closure care cost estimate has been provided to DEQ under a separate cover, using the cost calculation worksheets at Tables E.1 and E.2 (Appendix F) for closure cost, and Table F.1 (Appendix F) for post-closure care.

252:517-17-4. Updating

Provided they remain in effect, the worksheets in Tables E.1, E.2, and F.1 shall be updated coinciding with the update of Appendices H and I in OAC 252:515.

252:517-17-5. Permit transfers

(a) Transfer of Permit

When the permit is transferred from one owner/operator ("transferor") to another owner/operator ("transferee"), the transferee shall either provide new financial assurance or assume the existing assurance, if adequate in amount.

(b) Release of Transferor's Financial Assurance

DEQ will not release the transferor's financial assurance until the transferee has obtained approved financial assurance.

**252:517-17-6. Effect of Non-Renewal of, or Failure to Maintain or Provide,
Financial Assurance**

DEQ shall begin proceedings to summarily suspend or revoke the permit for failure to:

- (1) Establish financial assurance in accordance with this Subchapter;
- (2) Renew or maintain an approved financial assurance mechanism as required; or
- (3) Provide acceptable substitute financial assurance when necessary.

252:517-17-7. Substitute Financial Assurance

(a) Substitutions Allowed

Substitute financial assurance may be provided as specified in this Subchapter.

(b) Release of Previous Instrument

DEQ will not release any current assurances until an approved substitute is in place.

252:517-17-8. Economic Life of New CCR unit.

The Big Fork Ranch CCR facility is an existing operation. This section does not apply.

PART 3 – COST ESTIMATES

252:517-17-31 Cost Estimates for Closure

(a) Closure Cost Estimates

EVANS submitted the closure cost estimates to DEQ for approval on May 11, 2017.

The cost estimate is based on (1) maximum liability at any giving time during the active life of the facility and (2) hiring a third party to close the CCR facility in accordance with the permit, the approved closure plan, and the rules of this Chapter.

(b) Amount

The cost estimate calculated under this Part is presented in Tables E.1 and E.2, Appendix F of this application and was approved by DEQ on May 25, 2017.

(c) Determination of Closure Cost Estimate

(1) Closure cost estimates is determined in accordance with OAC 252:517-17-51.

(2) A copy of the cost estimate was submitted to DEQ on May 11, 2017 and approved on May 25, 2017.

(3) A copy of the approved estimate is placed in the operating record.

(d) Increases Required

Closure cost estimates and the amount of financial assurance provided shall be increased if, at any time during the active life, changes to the closure plan or facility conditions increase the maximum cost of closure.

(e) Reductions Allowed

Proposals for reduction of closure cost estimates and the amount of financial assurance required may be approved by DEQ.

(1) Conditions to Qualify for a Reduction:

(A) Part of the closure plan must have been completed and approved by DEQ.

(B) The cost estimate must be demonstrated to exceed the maximum cost of closure during the remaining life of the facility.

(2) Adequate Assurance Remains

The amount of security remaining after the reduction must adequately cover the estimated closure cost yet to be performed.

(3) DEQ Approval Required

Financial assurance shall not be reduced until DEQ approval has been granted.

252:517-17-32 Cost Estimates for Post-Closure Care

(a) Post-Closure Cost Estimates Required

EVANS submitted the post-closure cost estimates to DEQ for approval on May 11, 2017. The cost estimate is based on (1) maximum liability at any giving time during the post-closure care of the facility and (2) hiring a third party to conduct the post-closure care of the CCR facility in accordance with the permit, the approved post-closure plan, and the rules of this Chapter.

(b) Amount

The cost estimate shall be set by DEQ and equal the most expensive cost for post-closure care, as indicated by the approved post-closure plan.

(c) Determination of Post-Closure Cost Estimates

(1) Post-closure cost estimates is determined in accordance with OAC 252:517-17-51.

(2) A copy of the post-closure cost estimate was submitted to DEQ on May 11, 2017 and approved on May 25, 2017.

(3) A copy of the approved estimate shall be placed in the operating record.

(d) Increases Required

Post-closure cost estimates and the amount of financial assurance provided must be increased if, at any time during the active life, changes to the post-closure plan or facility conditions increase the maximum cost of post-closure care.

(e) Reduction Allowed

Proposals for reduction of post-closure cost estimates and the amount of financial assurance required may be approved by DEQ.

(1) Estimate Exceeds Cost

To qualify for a reduction, the cost estimate must be demonstrated to exceed the maximum cost of post-closure during the remaining life of the facility.

(2) Adequate Assurance Remains

The amount of security remaining after the reduction must adequately cover the estimated post-closure cost yet to be performed.

(3) DEQ Approval Required

Financial assurance shall not be reduced until DEQ approval has been granted.

252:517-17-33 Cost Estimates for Corrective Action

(a) Corrective Action Cost Estimates Required

When corrective action is required at a CCR facility, the cost estimates for corrective action shall be submitted to DEQ for approval. The cost estimates shall be a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the approved corrective action plan.

(b) Amount

The corrective action cost estimate shall be set by the DEQ and account for the total costs of corrective action activities as described in the approved corrective action plan for the entire corrective action period.

(c) Determination of Corrective Action Cost Estimate

(1) Corrective action cost estimates shall be determined in accordance with OAC 252:517-17-52.

(2) A copy of the cost estimate shall be submitted to the DEQ for approval.

(3) A copy of the approved estimate shall be placed in the operating record.

(d) Increases Required

The corrective action cost estimate and the amount of financial assurance provided must be increased at any time changes to the corrective action program or facility conditions increase the estimated cost of corrective action.

(e) Reduction Allowed

Proposals for reduction of corrective action cost estimates and the amount of financial assurance required may be approved by the DEQ.

(1) Estimate Exceeds Cost

To qualify for a reduction, the cost estimate must be demonstrated to exceed the maximum cost of corrective action at any time during the remaining life of the facility.

(2) Adequate assurance remains

The amount of security remaining after the reduction must adequately cover the estimated corrective action costs yet to be realized.

(3) DEQ approval Required

Financial assurance shall not be reduced until DEQ approval has been granted.

252:517-17-34 Annual Adjustments to Cost Estimates

(a) Adjustment Required

EVANS will submit updated cost estimates for closure, post-closure, and corrective action no later than April 9 of each year. The updated cost estimates shall be submitted to the DEQ for approval.

(1) Recalculation of Maximum Costs

The maximum costs of closure, post-closure, and corrective action may be recalculated in current dollars using the procedure in Part 5 of this Subchapter (relating to determination of cost estimates).

(2) Use of Inflation Factor

If there are no significant changes to the closure or post-closure plan, corrective action plan, or facility conditions, cost estimates may be adjusted by use of an inflation factor derived from the most recent annual "Implicit Price Deflator for Gross National Product" or the "Implicit Price Deflator for Gross Domestic Product" published by the U.S. Department of Commerce in its Survey of Current Business in the year for which the adjustment is being made.

(A) The first adjustment shall be made by multiplying the approved cost estimate by the inflation factor. The result is the adjusted cost estimate.

(B) Subsequent adjustments shall be made by multiplying the latest adjusted cost estimate by the latest inflation factor.

(3) Place in Operation Record

EVANS will place the approved adjusted cost estimates in the operating record.

(b) Corporate Test or Guarantee as Financial Assurance Mechanism

EVANS has provided surety bond for the closure and post-closure cost estimates. This section is not applicable to Big Fork Ranch facility.

PART 5 – DETERMINATION OF COST ESTIMATES

252:517-17-51 Cost Estimates for Closure and Post-Closure

(a) Determine Cost Estimates from Unit Costs

The Closure and Post-Closure cost estimates are presented in Tables E.1, E.2, and F.1, Appendix F of this application. The cost estimates were prepared using the DEQ Worksheets at 252:517 Appendices E and F.

(b) Deviation from Unit Costs Using Bids

EVANS has utilized the unit cost to calculate the cost of closure and post-closure. However, in the future they may deviate from the unit costs for one or more individual tasks identified in Appendix E or F of OAC 252:517 may be approved by using the average of three current bids. The following shall be submitted to the DEQ for approval:

- (1) Identification of the task(s) for which bids will be provided.

- (2) A statement of work fully describing the actions necessary for completion of the task(s) identified.

(3) Written bids from three independent contractors not affiliated with EVANS.

The bids shall be dated within 30 days of submittal and be an estimate of the contractor's cost for performing the work identified in the statement of work on behalf of the State of Oklahoma.

(c) Deviation from Unit Costs Using Actual Cost

EVANS has utilized the unit cost to calculate the cost of closure and post-closure. However, in the future they may deviate from the unit costs for one or more of the individual tasks identified in Appendix E or F of OAC 252:517 may be approved by using actual costs paid within the previous six (6) months by EVANS for work performed. The following shall be submitted to the DEQ for approval:

(1) Identification of the task(s) for which actual costs will be provided.

(2) A statement of work from the contractor, fully describing the work done to meet the requirements of the task(s).

(3) Written documentation from the contractor identifying his cost to EVANS for performance of the task.

(d) Tasks not Specified in Tables E.1, E.2, and F.1, Appendix F of this Application

There are no unique tasks required under the approved closure and post-closure plans requiring additional costs to be added to the closure and post-closure cost estimates.

(e) DEQ Approval Required

The completed worksheets has been submitted to DEQ for approval.

252:517-17-52 Cost Estimates for Corrective Action

(a) Equivalent tasks specified in Appendix E or F of OAC 252:517

For those corrective action tasks in the approved corrective action plan for which there are equivalent tasks in Appendix E or F, applicable portions of Appendix E or F or the procedure in OAC 252:517-17-51 shall be used to determine cost estimates.

(b) Equivalent tasks not specified in Appendix E or F of OAC 252:517

For those corrective action tasks in the approved corrective action plan for which there are no equivalent tasks in Appendix E or F, the cost estimate shall be determined by using the procedure in OAC 252:517-17-51(b)(1) through (b)(3) or (c)(1) through (c)(3).

PART 7. FINANCIAL ASSURANCE MECHANISMS

252:517-17-78. Surety bond

(a) Surety bond for closure and/or post-closure authorized

EVANS has submitted to DEQ a performance surety bond for financial assurance requirements for closure or post-closure care.

SUBCHAPTER 19 – RECORD KEEPING, NOTIFICATION, AND POSTING OF INFORMATION TO THE INTERNET

252:517-19-1 Recordkeeping Requirements

(a) Applicability

EVANS shall maintain files of all information required by this Section in a written operating record at their facility.

(b) Records Retention

Unless specified otherwise, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.

(c) Recordkeeping Methods

EVANS shall comply with the requirements of this Section in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.

(d) DEQ Submittal

EVANS shall submit to the DEQ any demonstration or documentation required by this Chapter, if requested, when such information is not otherwise available on EVANS' publicly accessible Internet site.

(e) Location Restrictions

The Big Fork Ranch is an existing CCR facility, therefore, the location restrictions under OAC 252:517-5-1(a), OAC 252:517-5-2(a), OAC 252:517-5-3(a), OAC 252:517-5-4(a), and OAC 252:517-5-5(a) do not apply.

(f) Design Criteria

The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The design and construction certifications as required by OAC 252:517-11-1(e) and (f).

(2) The documentation of liner type as required by OAC 252:517-11-2(a). This section is not applicable to Big Fork Ranch facility.

(3) The design and construction certifications as required by OAC 252:517-11-3(c) and (d).

(4) Documentation prepared by EVANS stating that the permanent identification marker was installed as required by OAC 252:517-11-4(a)(1) and OAC 252:517-11-5(a)(1).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(5) The initial and periodic hazard potential classification assessments as required by OAC 252:517-11-4(a)(2) and OAC 252:517-11-5(a)(2).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(6) The emergency action plan (EAP), and any amendment of the EAP, as required by OAC 252:517-11-4(a)(3) and OAC 252:517-11-5(a)(3), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(7) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders as required by OAC 252:517-11-4(a)(3)(i)(E) and OAC 252:517-11-5(a)(3)(i)(E).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(8) Documentation prepared by the owner or operator recording all activations of the emergency action plan as required by OAC 252:517-11-4(a)(3)(v) and OAC 252:517-11-5(a)(3)(v).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(9) The history of construction, and any revisions of it, as required by OAC 252:517-11-4(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with OAC 252:517-15-7.

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(10) The initial and periodic structural stability assessments as required by OAC 252:517-11-4(d) and OAC 252:517-11-5(d).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(11) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by OAC 252:517-11-4(d)(2) and OAC 252:517-11-5(d)(2).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(12) The initial and periodic safety factor assessments as required by OAC 252:517-11-4(e) and OAC 252:517-11-5(e).

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(13) The design and construction plans, and any revisions of it, as required by OAC 252:517-11-5(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with OAC 252:517-15-7.

The Big Fork Ranch is an existing CCR facility. This part does not apply.

(g) Operating Criteria

EVANS shall place the following information, as it becomes available, in the facility's operating record:

- (1) The CCR fugitive dust control plan, and any subsequent amendment of the plan, required by OAC 252:517-13-1(b), except that only the most recent control plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.
- (2) The annual CCR fugitive dust control report required by OAC 252:517-13-1(c).
- (3) The initial and periodic run-on and run-off control system plans as required by OAC 252:517-13-2(c).
- (4) The initial and periodic inflow design flood control system plan as required by OAC 252:517-13-3(c).
- (5) Documentation recording the results of each inspection and instrumentation monitoring by a qualified person as required by OAC 252:517-13-4(a).
- (6) The periodic inspection report as required by OAC 252:517-13-4(b)(2).
- (7) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by OAC 252:517-13-4(b)(5) and OAC 252:517-13-5(b)(5).

(8) Documentation recording the results of the weekly inspection by a qualified person as required by OAC 252:517-13-5(a).

(9) The periodic inspection report as required by OAC 252:517-13-5(b)(2).

(h) Groundwater Monitoring and Corrective Action

EVANS shall place the following information, as it becomes available, in the facility's operating record:

(1) The annual groundwater monitoring and corrective action report as required by OAC 252:517-9-1(e).

(2) Documentation of the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices as required by OAC 252-517-9-2(e)(1).

(3) The groundwater monitoring system certification as required by OAC 252-517-9-2(f).

(4) The selection of a statistical method certification as required by OAC 252:517-9-4(g)(6).

(5) Within 30 days of establishing an assessment monitoring program, the notification as required by OAC 252:517-9-5(e)(3).

(6) The results of constituent listed under Sections 252:517-9-5(a) and 252:517-9-6(b) of this application, as required by OAC 252:517-9-6(d)(1).

(7) Within 30 days of returning to a detection monitoring program, the notification as required by OAC 252:517-9-6(e).

(8) Within 30 days of detecting one or more constituents listed under Section 252:517-9-6(b) of this application at statistically significant levels above the groundwater protection standard, the notifications as required by OAC 252:517-9-6(g).

(9) Within 30 days of initiating the assessment of corrective measures requirements, the notification as required by OAC 252:517-9-6(g)(5).

(10) The completed assessment of corrective measures as required by OAC 252:517-9-7(d).

(11) Documentation prepared by EVANS recording the public meeting for the corrective measures assessment as required by OAC 252:517-9-7(e).

(12) The semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report as required by OAC 252:517-9-8(a), except that the selection of remedy report must be maintained until the remedy has been completed.

(13) Within 30 days of completing the remedy, the notification as required by OAC 252:517-9-9(e).

(i) Closure and Post-Closure Care

EVANS shall place the following information, as it becomes available, in the facility's operating record:

(1) The notification of intent to initiate closure of the CCR unit as required by OAC 252:517-15-5(c)(1).

(2) The annual progress reports of closure implementation as required by OAC 252:517-15-5(c)(2)(i) and (ii).

(3) The notification of closure completion as required by OAC 252:517-15-5(c)(3).

(4) The written closure plan, and any amendment of the plan, as required by OAC 252:517-15-7(b), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(5) The written demonstration(s), including the certification required by OAC 252:517-15-7(e)(2)(iii), for a time extension for initiating closure as required by OAC 252:517-15-7(e)(2)(ii).

- (6) The written demonstration(s), including the certification required by OAC 252:517-15-7(f)(2)(iii), for a time extension for completing closure as required by OAC 252:517-15-7(f)(2)(i).

- (7) The notification of intent to close a CCR unit as required by OAC 252:517-15-7(g).

- (8) The notification of completion of closure of a CCR unit as required by OAC 252:517-15-7(h).

- (9) The notification recording a notation on the deed as required by OAC 252:517-15-7(i).

- (10) The notification of intent to comply with the alternative closure requirements as required by OAC 252:517-15-8(c)(1).

- (11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-15-8(c)(2).

- (12) The written post-closure plan, and any amendment of the plan, as required by OAC 252:517-15-9(d), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(13) The notification of completion of post-closure care period as required by OAC 252:517-15-9(e).

(j) Financial assurance

EVANS shall follow the recordkeeping requirements of Subchapter 17 of this Chapter, as applicable to the facility.

(k) Retrofit Criteria

This section does not apply. There are no CCR surface impoundments at the site, and none are planned.

252:517-19-2. Notification Requirements

(a) DEQ notification.

The notifications required under paragraphs (e) through (i) of this Section must be sent to the DEQ before the close of business on the day the notification is required to be completed. For purposes of this Section, before the close of business means the notification must be postmarked or sent by electronic mail (email). If a notification deadline falls on a weekend or federal holiday, the notification deadline is automatically extended to the next business day. For those plans requiring approval by DEQ, submittal of the plan constitutes notification.

(b) Combining Notifications

Notifications may be combined as long as the deadline requirement for each notification is met.

(c) Notification Required

Unless otherwise required in this Section, the notifications specified in this Section must be sent to the DEQ within 30 days of placing in the operating record the information required by OAC 252:517-19-1.

(d) Location Restrictions

EVANS shall notify DEQ that each demonstration specified under OAC 252:517-19-1(e) has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(e) Design Criteria

The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

(f) Operating Criteria.

EVANS shall notify DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. EVANS shall:

(1) Provide notification of the availability of the CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under OAC 252:517-19-1(g)(1).

(2) Provide notification of the availability of the annual CCR fugitive dust control report specified under OAC 252:517-19-1(g)(2).

(3) Provide notification of the availability of the initial and periodic run-on and run-off control system plans specified under OAC 252:517-19-1(g)(3).

(4) There are no CCR surface impoundments within this facility. This section does not apply.

(5) There are no CCR surface impoundments within this facility. This section does not apply.

(6) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(g)(7).

(7) Provide notification of the availability of the periodic inspection reports specified under OAC 252:517-19-1(g)(9).

(g) Groundwater Monitoring and Corrective Action

EVANS shall notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. EVAND shall:

(1) Provide notification of the availability of the annual groundwater monitoring and corrective action report specified under OAC 252:517-19-1(h)(1).

(2) Provide notification of the availability of the groundwater monitoring system certification specified under OAC 252:517-19-1(h)(3).

(3) Provide notification of the availability of the selection of a statistical method certification specified under OAC 252:517-19-1(h)(4).

(4) Provide notification that an assessment monitoring programs has been established specified under OAC 252:517-19-1(h)(5).

(5) Provide notification that the CCR cell is returning to a detection monitoring program specified under OAC 252:517-19-1(h)(7).

(6) Provide notification that one or more constituents listed under 252:517-9-6(b) of this application have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under OAC 252:517-19-1(h)(8).

(7) Provide notification that an assessment of corrective measures has been initiated specified under OAC 252:517-19-1(h)(9).

(8) Provide notification of the availability of assessment of corrective measures specified under OAC 252:517-19-1(h)(10).

(9) Provide notification of the availability of the semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report specified under OAC 252:517-19-1(h)(12).

(10) Provide notification of the completion of the remedy specified under OAC 252:517-19-1(h)(13).

(h) Closure and Post-Closure Care

EVANS shall notify DEQ when information has been placed in the operating record and on EVANS's publicly accessible Internet site. EVANS must:

(1) Provide notification of the intent to initiate closure of the CCR unit specified under OAC 252:517-19-1(i)(1).

(2) Provide notification of the availability of the annual progress reports of closure implementation specified under OAC 252:517-19-1(i)(2).

(3) Provide notification of closure completion specified under OAC 252:517-19-1(i)(3).

(4) Provide notification of the availability of the written closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(4).

(5) Provide notification of the availability of the demonstration(s) for a time extension for initiating closure specified under OAC 252:517-19-1(i)(5).

(6) Provide notification of the availability of the demonstration(s) for a time extension for completing closure specified under OAC 252:517-19-1(i)(6).

(7) Provide notification of intent to close a CCR unit specified under OAC 252:517-19-1(i)(7).

(8) Provide notification of completion of closure of a CCR unit specified under OAC 252:517-19-1(i)(8).

(9) Provide notification of the deed notation as required by OAC 252:517-19-1(i)(9).

(10) Provide notification of intent to comply with the alternative closure requirements specified under OAC 252:517-19-1(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-19-1(i)(11).

(12) Provide notification of the availability of the written post-closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(12).

(13) Provide notification of completion of post-closure care specified under OAC 252:517-19-1(i)(13).

(i) Retrofit Criteria

This section does not apply. There are no CCR surface impoundments at the site, and none are planned.

252:517-19-3. Publicly accessible Internet Site Requirements

(a) Applicability

EVANS shall maintain a publicly accessible Internet site (CCR Web Site) containing the information specified in this Section. EVANS' Web site must be titled "CCR Rule Compliance Data and Information."

(b) Multiple CCR Units

EVANS may comply with the requirements of this Section by using the same Internet site for multiple CCR cells provided the CCR Web site clearly delineates information by the name or identification number of each cell.

(c) Website Records Retention

Unless otherwise required in this Section, the information required to be posted to the CCR Web site must be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site.

(d) Timeline for Posting to Website

Unless otherwise required in this Section, the information must be posted to the CCR Web site within 30 days of placing the pertinent information required by OAC 252:517-19-1 in the operating record.

(e) Location Restrictions

EVANS shall place each demonstration specified under OAC 252:517-19-1(e) on their CCR Web site.

(f) Design Criteria

EVANS shall place the following information on their CCR Web site:

- (1) No new unit will be added to this facility. This section is not applicable.

- (2) No new unit will be added to this facility. This section is not applicable.

- (3) No new unit will be added to this facility. This section is not applicable.

- (4) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

- (5) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

- (6) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

- (7) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

- (9) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

(10) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

(11) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

(12) The Big Fork Ranch is an existing CCR facility. The applicant is not proposing any lateral expansion of the CCR cells. This part does not apply.

(g) Operating Criteria

EVANS shall place the following information on their CCR Web site:

(1) The CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under OAC 252:517-19-1(g)(1) except that only the most recent plan must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this Section.

(2) The annual CCR fugitive dust control report specified under OAC 252:517-19-1(g)(2).

(3) The initial and periodic run-on and run-off control system plans specified under OAC 252:517-19-1(g)(3).

(4) This section does not apply. There are no CCR surface impoundments at the site, and none are planned.

(5) This section does not apply. There are no CCR surface impoundments at the site, and none are planned.

(6) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(g)(7).

(7) The periodic inspection reports specified under OAC 252:517-19-1(g)(9).

(h) Groundwater Monitoring and Corrective Action

EVANS shall place the following information on their CCR Web site:

(1) The annual groundwater monitoring and corrective action report specified under OAC 252:517-19-1(h)(1).

(2) The groundwater monitoring system certification specified under OAC 252:517-19-1(h)(3).

(3) The selection of a statistical method certification specified under OAC 252:517-19-1(h)(4).

(4) The notification that an assessment monitoring programs has been established specified under OAC 252:517-19-1(h)(5).

(5) The notification that the CCR cells are returning to a detection monitoring program specified under OAC 252:517-19-1(h)(7).

(6) The notification that one or more constituents listed under listed under 252:517-9-6(b) of this application have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under OAC 252:517-19-1(h)(8).

(7) The notification that an assessment of corrective measures has been initiated specified under OAC 252:517-19-1(h)(9).

(8) The assessment of corrective measures specified under OAC 252:517-19-1(h)(10).

(9) The semiannual reports describing the progress in selecting and designing remedy and the selection of remedy report specified under OAC 252:517-19-1(h)(12), except that the selection of the remedy report must be maintained until the remedy has been completed.

(10) The notification that the remedy has been completed specified under OAC 252:517-19-1(h)(13).

(i) Closure and Post-Closure Care

EVANS shall place the following information on their CCR Web site:

(1) The notification of intent to initiate closure of the CCR unit specified under OAC 252:517-19-1(i)(1).

(2) The annual progress reports of closure implementation specified under OAC 252:517-19-1(i)(2).

(3) The notification of closure completion specified under OAC 252:517-19-1(i)(3).

(4) The written closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(4).

(5) The demonstration(s) for a time extension for initiating closure specified under OAC 252:517-19-1(i)(5).

(6) The demonstration(s) for a time extension for completing closure specified under OAC 252:517-19-1(i)(6).

(7) The notification of intent to close a CCR unit specified under OAC 252:517-19-1(i)(7).

(8) The notification of completion of closure of a CCR unit specified under OAC 252:517-19-1(i)(8).

(9) The notification recording a notation on the deed as required by OAC 252:517-19-1(i)(9).

(10) The notification of intent to comply with the alternative closure requirements as required by OAC 252:517-19-1(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-19-1(i)(11).

(12) The written post-closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(12).

(13) The notification of completion of post-closure care specified under OAC 252:517-19-1(i)(13).

(j) Retrofit Criteria

EVANS shall place the following information on their CCR Web site:

(1) The written retrofit plan, and any amendment of the plan, specified under OAC 252:517-19-1(k)(1).

(2) The notification of intent to comply with the alternative retrofit requirements as required by OAC 252:517-19-1(k)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by OAC 252:517-19 1(k)(3).

(4) The demonstration(s) for a time extension for completing retrofit activities specified under OAC 252:517-19-1(k)(4).

(5) The notification of intent to retrofit a CCR unit specified under OAC 252:517-19-1(k)(5).

(6) The notification of completion of retrofit activities specified under OAC 252:517-19-1(k)(6).

LIST OF APPENDICES

Appendix No.	Content
A	DEQ Oath Application
B	Big Fork Ranch Lease
C	DEQ Easement Agreement
D	Drill Logs and Completion details of Groundwater Monitoring Wells Design Specifications for Diversion Channels / Berms
E	Tables
F	Registered Professional Engineer Certifications
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APPENDIX A
ODEQ Oath Application

APPLICATION FOR A SOLID WASTE PERMIT

Date: September 25, 2017

County: Noble

Send to:

Solid Waste Permitting Unit
Waste Management Division
Dept. of Environmental Quality
707 N. Robinson (PO Box 1677)
Oklahoma City, OK 73101-1677

FOR DEQ USE	
DEQ Log No.	_____
No. Copies	_____
Date Received:	_____

Evans & Associates Construction Co., Inc. proposes to establish, construct, operate, and maintain
(Applicant's Name)
the Big Fork Ranch, located at NW/4 Section 8, Township 24 North, Range 3 East
(Facility Name) (Exact legal description:

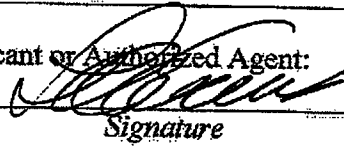
_____ *metes & bounds, platted lot, or land survey. Append extra sheets if necessary)*

in Noble County, Oklahoma, and hereby makes application for a permit to establish, construct, operate, and maintain a coal combustion residuals facility as required by **Oklahoma Solid Waste Management Act and Rules** pursuant thereto.

Brief description of application:

Applicant proposes to operate a coal combustion residuals (CCR) facility to dispose of, and engage in beneficial reuse of CCR. The Big Fork Ranch facility is an existing CCR facility.

Applicant or Authorized Agent:


Signature

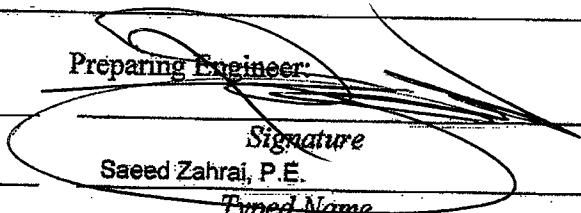
Lee Evans, President

Typed Name

Address: 3320 N. 14th Street

City: Ponca City State: OK 74602

Preparing Engineer:


Signature

Saeed Zahrai, P.E.

Typed Name

Address: P. O. Box 2228

City: Edmond State: OK 73083

Date signed: _____

Phone: (580) 765-6693

Date signed: _____

Phone: (405) 557-0000

Facility Address (if any): none

DEQ USE ONLY

VERIFICATION¹

STATE OF OKLAHOMA)
)
COUNTY OF Noble KAY)

SS

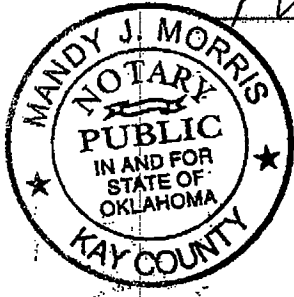
Lee Evans, President, of lawful age, being first duly sworn, upon oath state that I have read the foregoing APPLICATION FOR A SOLID WASTE PERMIT, that I am familiar with the matters set forth therein, and that the same are true to the best of my information and belief.

[Signature]
Applicant

Subscribed and sworn to before me this 9 day of October, 2017.
by LEE EVANS (Applicant or legal representative).

[Signature]
Notary Public

My commission expires:
6/25/21



¹ This Verification is required for a Tier III application.

APPENDIX B

Big Fork Ranch Lease

MINING AND DISPOSAL LEASE AGREEMENT

THIS MINING AND DISPOSAL LEASE AGREEMENT is entered into this 1st day of April, 1998, by and between Kaw Land & Cattle Co., Inc., an Oklahoma Corporation, hereinafter referred to as Lessor, located at P. O. Box 30, Ponca City, Oklahoma, 74602, and Evans & Associates Construction Co., Inc., an Oklahoma Corporation, hereinafter referred to as Lessee, located at P. O. Box 30, Ponca City, Oklahoma, 74602.

Be it hereby agreed and understood between the parties that Lessor wishes to lease unto Lessee portions of a certain tract of land more commonly known as the Big Fork Ranch and more particularly defined as follows to wit:

TRACT 1

Lots 11 & 12 of Section 5 and the NW/4 of Section 8, Township 24 North, Range 3 East, Noble County, State of Oklahoma, consisting of 225 acres, more or less,

TRACT 2

The E/2 E/2 of Section 7 and the SW/4 SW/4 of Section 8, Township 24 North, Range 3 East, Noble County, State of Oklahoma, consisting of 80 acres, more or less,

together with the right of ingress and egress from the nearest and most accessible county road located at the Southwest corner of Section 7, Township 24 North, Range 3 East, Noble County, State of Oklahoma.

The term of this mining and disposal lease shall continue in force for a period of eleven (11) years. Lessee may at its option extend the original lease period for two (2) additional ten (10) year periods. In consideration for said lease, Lessee agrees to pay Lessor the sum of One Thousand and 00/100 Dollars (\$1,000.00) per month during the lease period. In addition, Lessee agrees that the monthly lease payment shall be adjusted annually beginning April 1, 1999, by a percentage equal to the percentage change in the published Wholesale Producers Price Index between January 1 and December 31 of the preceding year. It is further agreed by the parties that this lease is not assignable.

Lessee acknowledges Lessor's right to reasonably utilize the herein described leasehold for its cattle operations. It shall be the Lessee's responsibility to accommodate Lessor's cattle operations to the extent of constructing or facilitating the construction of fences, cattle guards or other necessary facilities needed to keep cattle away from hazards associated with mining or disposal operations. Additionally, Lessee hereby agrees to use reasonable precautions along its routes of ingress and egress to and from the leased premises so as not to interfere with Lessor's cattle operations including the observance of cattle right-of-way and posted speed limits within the Big Fork Ranch premises. Lessee agrees that it shall maintain the roads used in its operations at its sole expense and Lessor shall have access to said roads for its operations.

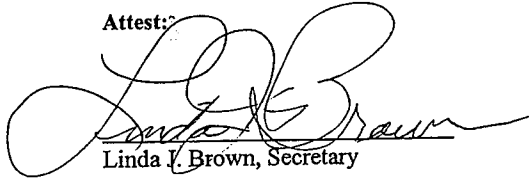
Lessee agrees to abide by all federal, state and county rules and regulations pertaining to its operations on the leased premises.

Lessee agrees to hold Lessor harmless and defend the same from any action of any kind arising from the operations of Lessor on the leased premises.

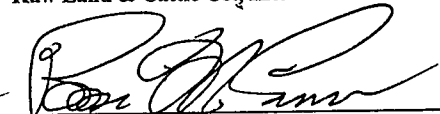
Executed this 13th day of April, 1998.

LESSOR:

Attest:

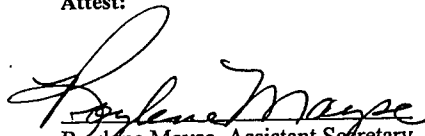

Linda J. Brown, Secretary

Kaw Land & Cattle Co., Inc.



Bruce M. Evans, Vice President

LESSEE:

Attest:


Roylene Mayse, Assistant Secretary

Evans & Associates Construction Co., Inc.


Jackie E. Bohon, Executive Vice President

MINING AND DISPOSAL LEASE AGREEMENT

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Be it hereby agreed and understood between the parties that Lessor wishes to lease unto Lessee portions of a certain tract of land more commonly known as the Big Fork Ranch and more particularly defined as follows to wit:

Lots 11 & 12 of Section 5 and the W/2 of Section 8, Township 24 North, Range 3 East, Noble County, State of Oklahoma, consisting of 385 acres, more or less,

together with the right of ingress and egress from the nearest and most accessible county road located at the Southwest corner of Section 7, Township 24 North, Range 3 East, Noble County, State of Oklahoma.

The term of this mining and disposal lease shall continue in force for a period of eleven (11) years. Lessee may at its option extend the original lease period for two (2) additional ten (10) year periods. In consideration for said lease, Lessee agrees to pay Lessor the sum of One Thousand and 00/100 Dollars (\$1,000.00) per month during the lease period. In addition, Lessee agrees that the monthly lease payment shall be adjusted annually beginning April 1, 1999, by a percentage equal to the percentage change in the published Wholesale Producers Price Index between January 1 and December 31 of the preceding year. It is further agreed by the parties that this lease is not assignable.

Lessee acknowledges Lessor's right to reasonably utilize the herein described leasehold for its cattle operations. It shall be the Lessee's responsibility to accommodate Lessor's cattle operations to the extent of constructing or facilitating the construction of fences, cattle guards or other necessary facilities needed to keep cattle away from hazards associated with mining or disposal operations. Additionally, Lessee hereby agrees to use reasonable precautions along its routes of ingress and egress to and from the leased premises so as not to interfere with Lessor's cattle operations including the observance of cattle right-of-way and posted speed limits within the Big Fork Ranch premises. Lessee agrees that it shall maintain the roads used in its operations at its sole expense and Lessor shall have access to said roads for its operations.


Lessee agrees to abide by all federal, state and county rules and regulations pertaining to its operations on the leased premises.

Lessee agrees to hold Lessor harmless and defend the same from any action of any kind arising from the operations of Lessor on the leased premises.

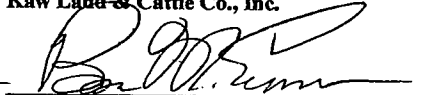
Executed this 1st day of April, 1998.

LESSOR:

Attest:



Linda J. Brown, Secretary

Kaw Land & Cattle Co., Inc.

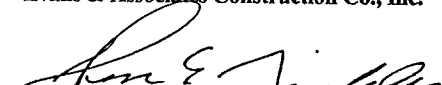

Bruce M. Evans, Vice President

LESSEE:

Attest:


Lee Evans, Assistant Secretary

Evans & Associates Construction Co., Inc.


Glen Nickles, Vice President

APPENDIX C

ODEQ Easement Agreement

TEMPORARY EASEMENT FOR ACCESS

Pursuant to the Oklahoma Environmental Quality Code (27A O.S. S. 2-1-101 et seq., including the Solid Waste Management Act, the rules promulgated thereunder, and in accordance with the conditions and requirements Permit No. _____, issued by the Oklahoma State Department of Health, the predecessor in interest to the Oklahoma Department of Environmental Quality (DEQ) on _____, 2017, Evans & Associates Construction Co., Inc., its successors and assigns, hereinafter referred to as Grantor, does hereby grant unto the DEQ, including its contractors, employees and its successors and assigns, the right of access for purposes of performing closure, post-closure monitoring, or corrective action in the event of default by the owner or operator. The Easement is granted over and across the following described land, situated in Noble County, State of Oklahoma.

Tract

NW/4 Section 8, Township 24 North, Range 3 East, Noble County, more particularly described as the permitted area of Evans and Associates Construction Company, Inc., Big Fork Ranch facility, Oklahoma Department of Environmental Quality Permit Number _____

This temporary easement for Access is given subject to the following conditions:

1. The Grantor hereby grants unto the DEQ an easement and right-of-way over and across the above tract set out, for access to said Tract for the purposes of conducting closure and post-closure activities and/or corrective action as prescribed by the laws of the State of Oklahoma and Rules of the DEQ;
2. The Grantor hereby grants unto the DEQ an easement and right-of-way over and across the tract above set out, for the purposes of utilizing borrow material while performing closure and post-closure activities and/or corrective action as prescribed by the laws of the State of Oklahoma and Rules of the DEQ;
3. This Easement is temporary and shall become null and void upon certification by the DEQ that post-closure and/or corrective action has been properly completed.

This Easement shall be binding upon the heirs, successors, and assigns of the parties hereto.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand this _____ day of _____, 2017.

(Name, Title)

ACKNOWLEDGEMENT

STATE OF OKLAHOMA)
)
COUNTY OF NOBLE) SS:

Before me, the undersigned, a Notary Public for said County and State, on this _____ day of _____, 2017, personally appeared _____ to me known to be the identical person who executed the same as (his/her) free and voluntary act and deed, for the uses and purposes therein set forth.

Witness my hand and official seal the date above written.

Notary Public

My commission expires:

APPENDIX D

- **Drill Logs and Completion details of Groundwater Monitoring Wells**
 - **Design Specifications for Diversion Channels / Berms**

- **Drill Logs and Completion details of Groundwater Monitoring Wells**

WELL LOG NO. #6A

G W N P # 6 A

TYPE: WATER

DRILLER: ROBINSON

LOCATION: Evers 7 by Ash

DEPTH FT.	SYMBOL	DESCRIPTION OF MATERIAL	ADDITIONAL INFORMATION AND CERTIFICATION
		SURFACE ELEVATION: _____	INSTALLED: <u>2" sch 40 PVC</u> <u>0-28 solid</u> <u>28-35 screen</u> COMPLETION DEPTH: <u>35</u> DEPTH TO WATER: <u>25</u> CERTIFICATION: THE WORK DESCRIBED ABOVE WAS DONE UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE. ROBINSON WATER WELLS 511 N. MAIN TONKAWA, OK 74653 <u>Bruce Robinson</u> BRUCE ROBINSON #0167 DATE <u>11-2-00</u>
		<u>brn clay</u>	
<u>5</u>		<u>red clay</u>	
<u>10</u>		<u>red clay</u>	
<u>15</u>		<u>red clay</u>	
<u>20</u>			
<u>25</u>		<u>red shale & limestone strk.</u>	
		<u>red clay</u>	
<u>30</u>		<u>fractured clay & red shale</u>	
		<u>red shale</u>	
<u>35</u>		<u>hard red shale & sandstone</u>	
		<u>hard gray limestone</u>	
<u>40</u>			
<u>45</u>			
<u>50</u>			

WELL LOG No. _____

C W M P # 8A

TYPE: WATER

DRILLER: ROBINSON

LOCATION: Evans Lydash

DEPTH FT	SYMBOL	DESCRIPTION OF MATERIAL	ADDITIONAL INFORMATION AND CERTIFICATION
		SURFACE ELEVATION: <u>brn. clay</u>	INSTALLED: <u>40' plain 2" sch 40</u> <u>5' screen 40-45</u> COMPLETION DEPTH: <u>45'</u> DEPTH TO WATER: _____
5			
10		lt brown sandy clay	
15			
20			
25			
30		heavy brn. clay	
35		blue shale layer broken into	
40		red clay + shale	
45		limestone	
50			

CERTIFICATION:
THE WORK DESCRIBED ABOVE WAS DONE UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.

ROBINSON WATER WELLS
511 N. MAIN
TONKAWA, OK 74653

Bruce Robinson
BRUCE ROBINSON #0167

DATE 11-20-00

WELL LOG NO. #9A
GWMP

TYPE: WATER

DRILLER: ROBINSON

LOCATION: Evans Fly Ash

DEPTH FT.	SYMBOL	DESCRIPTION OF MATERIAL	ADDITIONAL INFORMATION AND CERTIFICATION
0		SURFACE ELEVATION: _____	INSTALLED:
			<u>All measurements</u>
5		<u>limestone</u>	<u>Ground level</u>
			<u>0-14 solid</u>
10			<u>14-19 screen</u>
15		<u>limestone</u>	<u>2" sch 40 PVC</u>
20			COMPLETION DEPTH: <u>19'6"</u>
			DEPTH TO WATER: _____
25			
30		<u>red clay & shale</u>	
35			CERTIFICATION:
			THE WORK DESCRIBED ABOVE WAS DONE UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.
40			ROBINSON WATER WELLS
			511 N. MAIN
45			TONKAWA, OK 74653
			<u>Bruce Robinson</u>
50			BRUCE ROBINSON #0167
			DATE <u>10-23-00</u>
			D-5

WELL LOG No. _____

G W M P # 10 A

TYPE: WATER

DRILLER: ROBINSON

LOCATION: Evans Fly Ash

DEPTH FT.	SYMBOL	DESCRIPTION OF MATERIAL	ADDITIONAL INFORMATION AND CERTIFICATION
		SURFACE ELEVATION: _____	INSTALLED: <u>5' sch 40 screen</u> <u>from 24' - 29'</u> <u>27' sch 40 plain</u>
		<u>Fly ash</u>	
<u>5</u>			
		<u>bin clay</u>	
<u>10</u>			
<u>15</u>			
		<u>blk - bin +</u>	
		<u>gray clay</u>	
<u>20</u>		<u>co - mingled</u>	
		<u>broken rocks</u>	
<u>25</u>			
<u>30</u>			
<u>35</u>			
		<u>red clay &</u>	
<u>40</u>		<u>shale</u>	
<u>45</u>			
<u>50</u>			

COMPLETION DEPTH: 30'

DEPTH TO WATER: _____

CERTIFICATION:
THE WORK DESCRIBED ABOVE WAS DONE UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.

ROBINSON WATER WELLS
511 N. MAIN
TONKAWA, OK 74653

Bruce Robinson
BRUCE ROBINSON #0167

DATE 11-21-00

WELL LOG NO. _____

G W M P # 7 A

TYPE: WATER

DRILLER: ROBINSON

LOCATION: Evans Fly Ash

DEPTH Ft.	SYMBOL	DESCRIPTION OF MATERIAL	ADDITIONAL INFORMATION AND CERTIFICATION
		SURFACE ELEVATION: _____	
5		sandy brown clay	INSTALLED: 5' sch 40 screen from 20'6" - 15'6" 18' sch 40 Plais
10		heavy brn. clay	
		11' 11" 6" limestone streaks	
15		red clay	
20		red sandstone	COMPLETION DEPTH: <u>21'</u> 20'
25			DEPTH TO WATER: _____
30			
35			CERTIFICATION: THE WORK DESCRIBED ABOVE WAS DONE UNDER MY SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.
40			ROBINSON WATER WELLS 511 N. MAIN TONKAWA, OK 74653
45			<u>Bruce Robinson</u> BRUCE ROBINSON #0167
50			DATE <u>11-21-00</u>

- **Design Specifications for Diversion Channels / Berms**

DESIGN AND SPECIFICATIONS FOR
BERM/CHANNEL NO. 3
E & A/BIG FORK RANCH
25YR-24HR PRECIPITATION EVENT

PREPARED FOR:

EVANS & ASSOCIATES CONSTRUCTION CO., INC.

3320 N. 4th Street

PONCA CITY, OK 74602

PREPARED BY:

EMERA, CORP.

P. O. BOX 2228

EDMOND, OK 73083

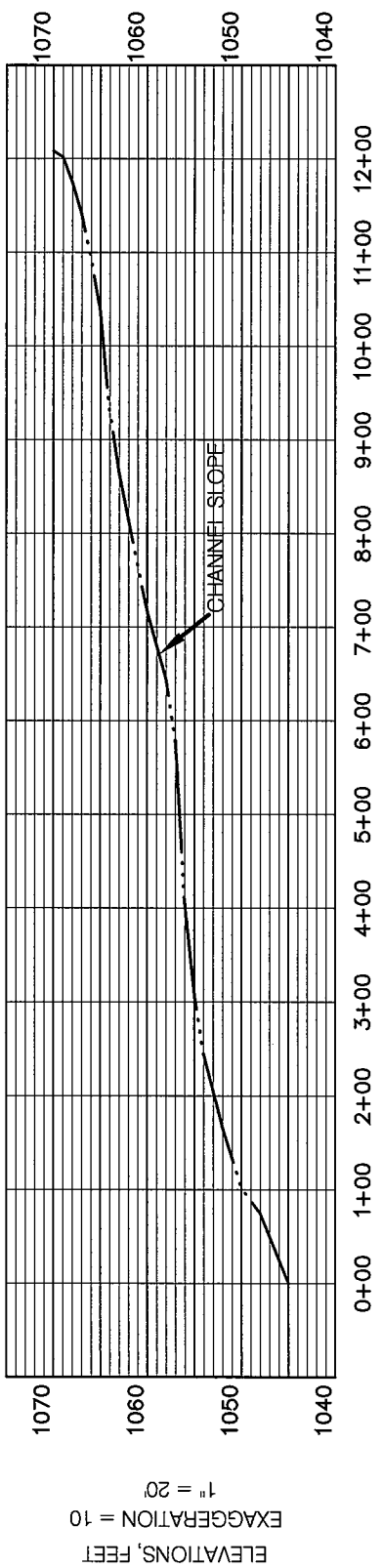
405-557-0000

9-11-2017

SAEED ZAHRAI, P. E.

EMERA, CORP.
P. O. BOX 2228
EDMOND, OK 73083

Phone: 405-557-0000
Email: mszahrai@gmail.com



HORIZONTAL DISTANCE, FEET
1" = 200'

PROFILE OF BERM/CHANNEL NO. 3

SCALE: AS NOTED

PREPARED FOR:

**EVANS & ASSOCIATES
CONSTRUCTION CO., INC.**
3320 N. 4th STREET, PONCA CITY, OKLAHOMA 74602

NAME OF PROJECT: BIG FORK RANCH

DRAWING NO.:

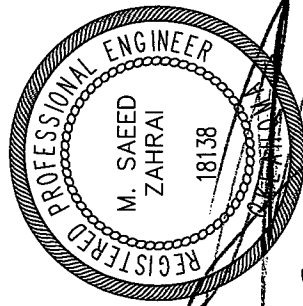
PREPARED BY:

EMERA
CORPORATION

P.O. BOX 2228 EDMOND, OK 73083

DATE: 09-20-2017 REVISED:

DRAWN BY: TN



General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	25 yr - 24 hr
Rainfall Depth:	6.700 inches

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Channel	#1	==>	End	0.000	0.000	BERM/CHANNEL NO. 3

#1
Chan'

Structure Summary:

	Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)
#1	8.400	8.400	42.36	4.19

Structure Detail:

Structure #1 (Vegetated Channel)

BERM/CHANNEL NO. 3

Trapezoidal Vegetated Channel Inputs:

Material: Grass mixture

Bottom Width (ft)	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Retardance Classes	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)	Limiting Velocity (fps)
6.00	2.5:1	2.5:1	2.0	D, B	0.30			5.0

Vegetated Channel Results:

	Stability Class D w/o Freeboard	Stability Class D w/ Freeboard	Capacity Class B w/o Freeboard	Capacity Class B w/ Freeboard
Design Discharge:	42.36 cfs		42.36 cfs	
Depth:	1.07 ft	1.37 ft	1.62 ft	1.92 ft
Top Width:	11.35 ft	12.85 ft	14.11 ft	15.61 ft
Velocity:	4.56 fps		2.60 fps	
X-Section Area:	9.28 sq ft		16.31 sq ft	
Hydraulic Radius:	0.789		1.107	
Froude Number:	0.89		0.43	
Roughness Coefficient:	0.0394		0.0867	

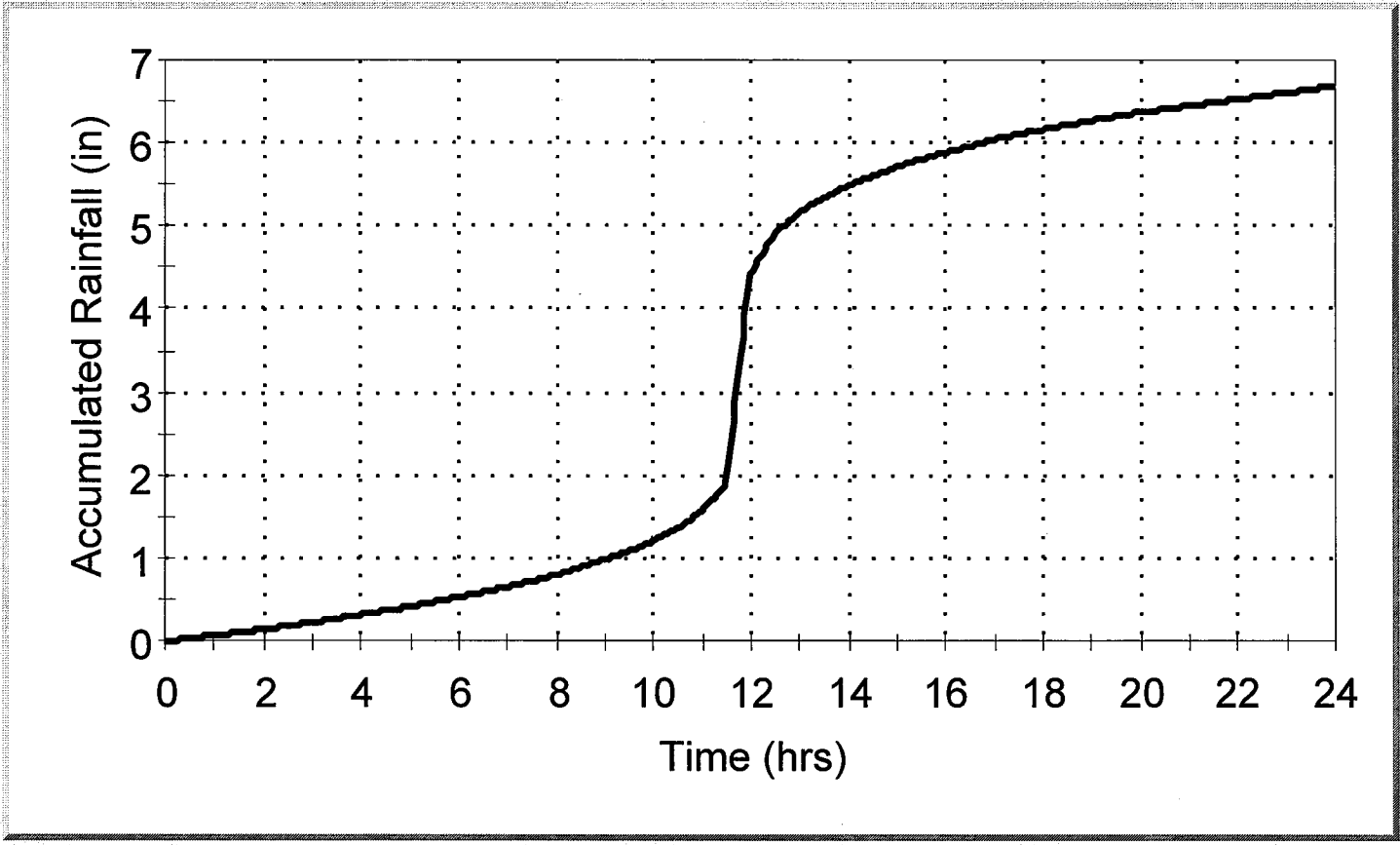
Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	8.400	0.026	0.000	0.000	94.000	M	42.36	4.193
Σ		8.400						42.36	4.193

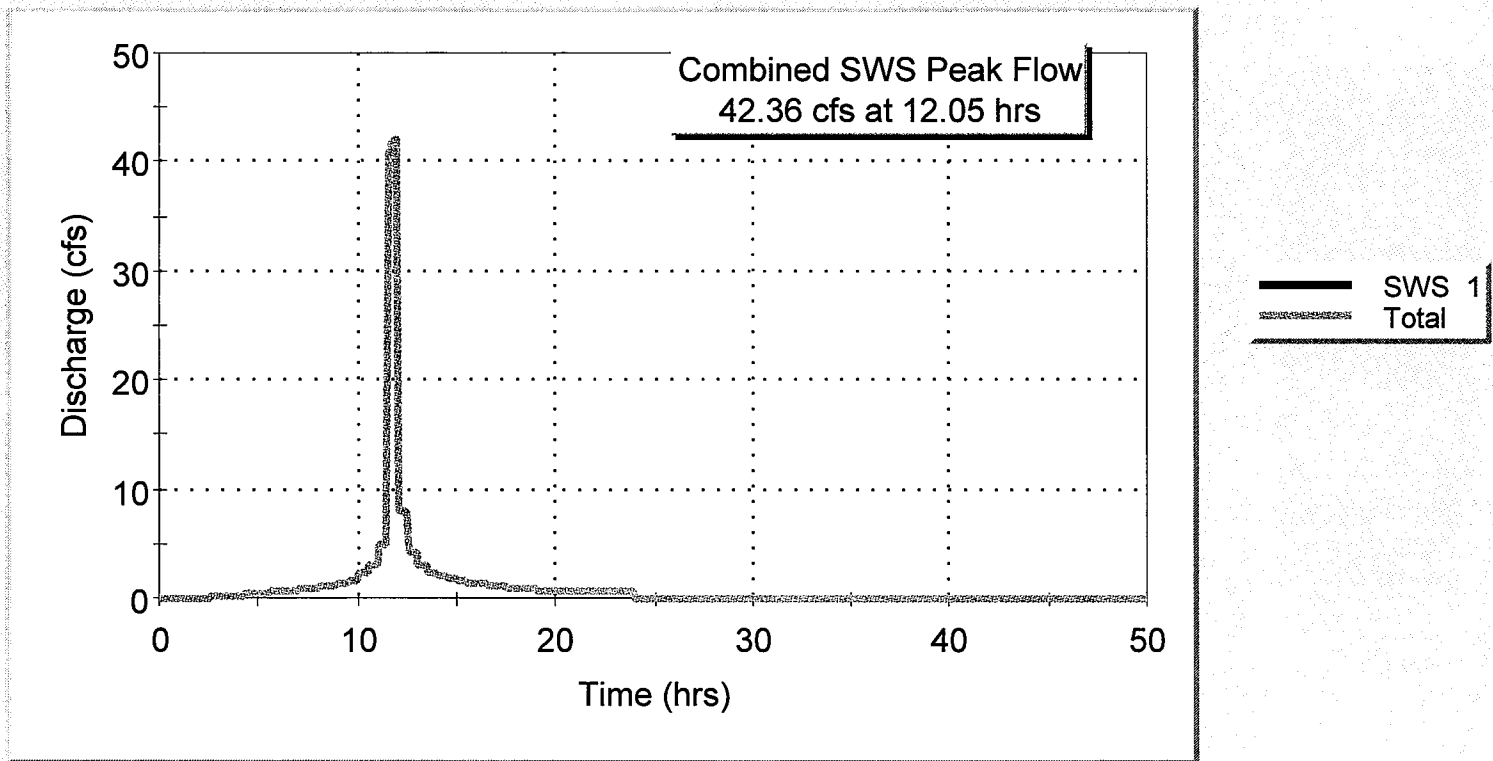
Subwatershed Time of Concentration Details:

Stru #	SWS #	Land Flow Condition	Slope (%)	Vert. Dist. (ft)	Horiz. Dist. (ft)	Velocity (fps)	Time (hrs)
#1	1	5. Nearly bare and untilled, and alluvial valley fans	4.76	10.00	210.00	2.180	0.026
#1	1	Time of Concentration:					0.026

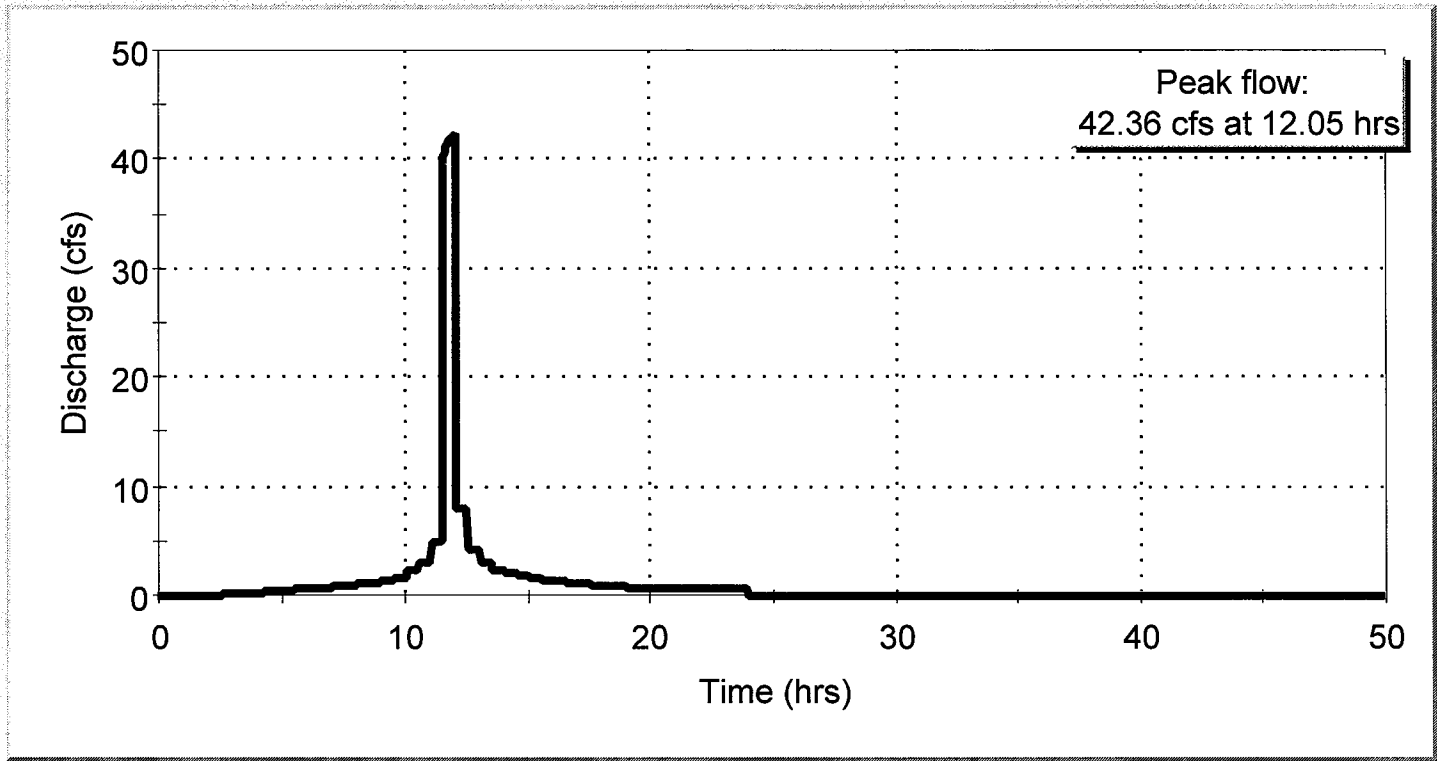
NRCS Type II, 25 yr - 24 hr Storm



Contributing SWS Hydrograph(s) for Structure # 1 (does not include upstream flow)



Total Inflow Hydrograph to Structure # 1 (includes all upstream flow)



APPENDIX E

Registered Professional Engineer Certifications

REGISTERED PROFESSIONAL ENGINEER CERTIFICATIONS

Certification No.	Regulations	Content
1	252:517-5-5 Unstable Areas	The Big Fork Ranch facility is not in an unstable area. This certification is not required.
2	252:517-9-2(f) Groundwater Monitoring System	Evans must obtain a certification from a qualified professional engineer stating that the Groundwater monitoring system has been designed and constructed to meet the requirements of 252:517-9-2.
3	252:517-9-4(g)(6) Groundwater Sampling and Analysis Requirements	Evans must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for Big Fork Ranch. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.
4	252:517-13-1(b)(7) Air Resources	Evans must obtain a certification from a qualified professional engineer stating that the CCR Fugitive Dust Control Plan or any subsequent amendment of it meets the requirements of CCR Fugitive Dust Control Plan described under Section 252:517-13-1 of the permit application. On October 9, 2015, EVANS obtained a certification from a qualified professional engineer that the initial fugitive dust control plan meets the requirement of this Section.
5	252:517-13-2(c)(4) AND (5) Run-Off/Run-On Control System Plans	Prepare periodic run-on and run-off control system plans every five (5) years. The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this Section. Place completed plans in the facility operating record.
6	252:517-15-3 Certification of Final Closure	After Big Fork Ranch site closure, EVANS will submit a Certification of Final Closure to DEQ.
7	252:517-15-7(d)(3) Final Cover System	The final cover system design will be certified by a qualified Oklahoma Registered Professional Engineer that the cover meets the requirements of Section 252:517-15-7.

8	252:517-15-7(f)(3) Closure Certification	EVANS will provide a certification from a qualified Oklahoma Registered Professional Engineer that the CCR unit was closed in compliance with the closure plan described in Part 252:517-15-7(b).
9	252:517-15-7(h) Closure Notification	Within 30 days of the closure completion of a CCR unit, EVANS will place a notification in its facility's operating record (as required by 252:517-19-1(i)(8)) that a CCR unit has been closed. The notification will include a certification by a qualified Oklahoma Registered Professional Engineer as required by OAC 252:517-15-7(f)(3).
10	252:517-15-15-9(e) Notification of Completion of Post- Closure Care Period	The notification shall include the certification by a qualified Oklahoma Registered Professional Engineer verifying the post-closure care has been completed in accordance with the approved closure plan.
11	252:517-15-11 Post-Closure Performance Certification	Certification that post-closure care was completed according to the DEQ-approved post-closure plan, the DEQ permit, and applicable DEQ regulations will be prepared by a qualified Oklahoma Registered Professional Engineer.
12	252:517-9-1(e) Annual Groundwater Monitoring & Corrective Action Report	Report must document status of the groundwater monitoring and corrective action program, summarize actions completed, problems encountered, corrective actions taken and upcoming projects. Report includes a map of groundwater wells, and describes monitoring wells added or deleted. Report due no later than January 31 of each year, starting January 31, 2018. Certification by a qualified Oklahoma Registered Professional Engineer is not required.
13	252:517-9-4(h)(6)(c) 90-Day Groundwater Analysis Review	Within 90 days after completing and analysis, Evans shall review groundwater analysis to determine whether there is a significant increase for any constituent over background at each well. Certification by a qualified Oklahoma Registered Professional Engineer is not required.
14	252:517-11-4(a)(1) I.D. Sign	Post a six (6) foot high identification sign at facility entrance showing Facility name, CCR permit number, and name of the owner or operator of the CCR unit. Certification by a qualified Oklahoma Registered Professional Engineer is not required.

15	252:517-17-34 Annual Closure Cost Estimate Adjustment	<p>Closure, post-closure, and/or corrective action cost estimates shall be adjusted no later than April 9 of every year, and submitted to DEQ for approval.</p> <p>Certification by a qualified Oklahoma Registered Professional Engineer is not required.</p>
16	252:517-15-7(i) Deed Notation	<p>Except as provided by paragraph (i)(4) of this Section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during title search.</p> <p>Certification by a qualified Oklahoma Registered Professional Engineer is not required.</p>

EVANS & ASSOCIATES CONSTRUCTION CO., INC.
3320 N. 14TH, PONCA CITY, OK 74602

GROUNDWATER MONITORING SYSTEM CERTIFICATION

BIG FORK RANCH FACILITY

This will serve to certify that the Big Fork Ranch facility Groundwater Monitoring System has been designed and installed to meet the requirements of OAC 252:517-9-2. The number of groundwater monitoring wells in-service meet the requirements for the minimum number of wells at OAC 252:517-9-2(c) as follows: up-gradient monitoring well in-service is GWMP-8A and down-gradient monitoring wells in-service are GWMP-6A, 9A, and 10A. The monitoring well locations appear on the Potentiometric Surface Map (MP-8) and the Highest Historic Ground Water Elevation Map (MP-9).

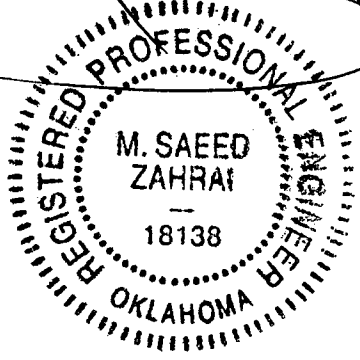
This Certification is in accordance with DEQ rules at OAC 252-517-9-2(f).



(Signed)

9-13-2017

(Date)



(Sealed) Oklahoma Professional Engineer #

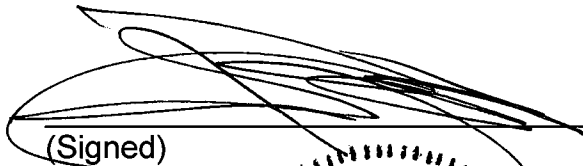
EVANS & ASSOCIATES CONSTRUCTION CO., INC.
3320 N. 14TH, PONCA CITY, OK 74602

GROUNDWATER DATA EVALUATION METHOD CERTIFICATION

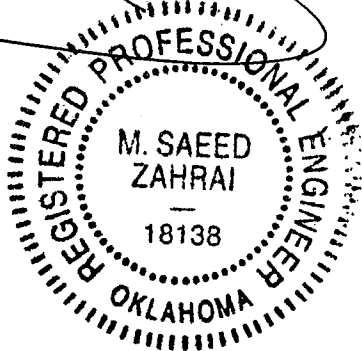
BIG FORK RANCH FACILITY

This will serve to certify that data collected for the Big Fork Ranch facility Groundwater Monitoring System is evaluated according DEQ requirements at OAC 252:517-9-4(g)(1-5). The data statistical method used is the control chart approach, selected for the following reasons: 1) limited number of wells, four (4); 2) limited number of analytical parameters for detection monitoring, seven (7) and; 3) graphical presentation of groundwater data allows rapid identification changes in chemical parameter concentrations, and groundwater elevations.

This Certification is in accordance with DEQ rules at OAC 252-517-9-4(g)(6).


(Signed)

9-13-2017
(Date)



(Sealed) Oklahoma Professional Engineer #


EVANS & ASSOCIATES CONSTRUCTION CO., INC.
3320 N. 14TH, PONCA CITY, OK 74602

DUST CONTROL PLAN CERTIFICATION

BIG FORK RANCH FACILITY

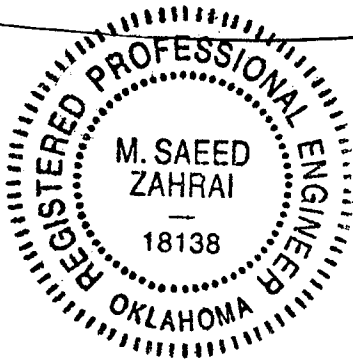
This will serve to certify that the Big Fork Ranch facility Dust Control Plan has been prepared under the requirements of DEQ rules at OAC 252:517-13-1(b)(1-6). The initial Big Fork Ranch Dust Control Plan was prepared effective October 9, 2015, in compliance with DEQ rules at OAC 252:517-13-1(b)(5).

This Certification is in accordance with DEQ rules at OAC 252-517-13-1(b)(7).



(Signed)

9-13-2017
(Date)



(Sealed) Oklahoma Professional Engineer #

EVANS & ASSOCIATES CONSTRUCTION CO., INC.
3320 N. 14TH, PONCA CITY, OK 74602

RUN-ON/RUN-OFF CONTROL PLAN CERTIFICATION

BIG FORK RANCH FACILITY

This will serve to certify that the Big Fork Ranch facility Run-On/Run-Off Control Plan is designed, constructed, operated, and maintained in accordance with DEQ rules at OAC 252:517-13-2 to: 1) prevent run-on from entering active CCR cells, and 2) contain run-off from active CCR cells after a 24-hour, 25-year storm at the Big Fork Ranch facility.

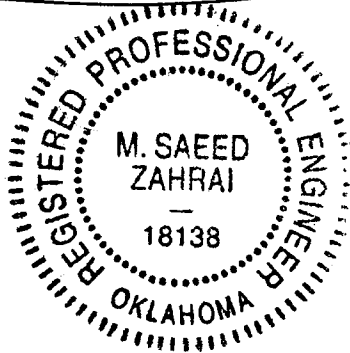
This Certification is prepared under the requirements of DEQ rules at OAC 252-517-13-2(c)(5).



(Signed)

9-13-2017

(Date)



(Sealed) Oklahoma Professional Engineer #

APPENDIX F

Tables

TABLE 1
WATER SAMPLING PRESERVATION PROTOCOL

PARAMETER	CONTAINER	PRESERVATIVE	MAXIMUM HOLDING TIME
pH	plastic or glass	none required	analyze immediately
temp.	plastic or glass	none required	analyze immediately
Acidity	plastic or glass	cool, 6°C (+/-2°C)	14 days
alkalinity carbonate & bicarbonate	plastic or glass	cool, 6°C (+/-2°C)	14 days
chloride	plastic or glass	none required	28 days
color	plastic or glass	cool, 6°C (+/-2°C)	48 hours
specific conductance	plastic or glass	cool, 6°C (+/-2°C)	28 days
sulfate	plastic or glass	cool, 6°C (+/-2°C)	28 days
total suspended solids (TSS)	plastic or glass	cool, 6°C (+/-2°C)	7 days
total dissolved solids (TDS)	plastic or glass	cool, 6°C (+/-2°C)	7 days
antimony	plastic or glass	HNO ₃ to pH < 2 *	6 months
arsenic	plastic or glass	HNO ₃ to pH < 2 *	6 months
barium	plastic or glass	HNO ₃ to pH < 2 *	6 months
beryllium	plastic or glass	HNO ₃ to pH < 2 *	6 months
boron	plastic or glass	HNO ₃ to pH < 2 *	6 months
cadmium	plastic or glass	HNO ₃ to pH < 2 *	6 months
chromium, total	plastic or glass	HNO ₃ to pH < 2 *	6 months
iron, total	plastic or glass	HNO ₃ to pH < 2 *	6 months
lead	plastic or glass	HNO ₃ to pH < 2 *	6 months
lithium	plastic or glass	HNO ₃ to pH < 2 *	6 months
manganese, total	plastic or glass	HNO ₃ to pH < 2 *	6 months
mercury	plastic or glass	HNO ₃ to pH < 2	28 days
molybdenum	plastic or glass	HNO ₃ to pH < 2	6 months
Radium 226 & 228	plastic, 1 liter	HCl or HNO ₃ to pH < 2	6 months
selenium	plastic or glass	HNO ₃ to pH < 2 *	6 months
silver	plastic or glass	HNO ₃ to pH < 2 *	6 months
sodium	plastic or glass	HNO ₃ to pH < 2 *	6 months
calcium	plastic or glass	HNO ₃ to pH < 2 *	6 months
magnesium	plastic or glass	HNO ₃ to pH < 2 *	6 months
potassium	plastic or glass	HNO ₃ to pH < 2 *	6 months
phosphorus	plastic or glass	H ₂ SO ₄ to pH<2, cool, 6°C (+/-2°C)	28 days
carbon dioxide			analyze immediately
nitrite nitrogen	plastic or glass	cool, 6°C (+/-2°C)	48 hours
nitrate nitrogen	plastic or glass	cool, 6°C (+/-2°C)	48 hours
fluoride	plastic	none required	28 days
cobalt	plastic or glass	HNO ₃ to pH < 2 *	6 months
copper	plastic or glass	HNO ₃ to pH < 2 *	6 months
nickel	plastic or glass	HNO ₃ to pH < 2 *	6 months
thallium	plastic or glass	HNO ₃ to pH < 2 *	6 months
vanadium	plastic or glass	HNO ₃ to pH < 2 *	6 months
zinc	plastic or glass	HNO ₃ to pH < 2 *	6 months
hardness, total	plastic or glass	HNO ₃ to pH < 2	6 months
turbidity	plastic or glass	cool, 6°C (+/-2°C)	48 hours
dissolved oxygen	glass bottle+top	none required	analyze immediately
ammonia	plastic or glass	H ₂ SO ₄ to pH<2, cool, 6°C (+/-2°C)	28 days
hydrogen sulfide		none required	analyze immediately

* or 24 hours prior to analysis

TABLE 2
WATER BALANCE

PARAMETERS	CELL NOS.	
	3	8
Drainage Area, Ac.	6.4	3.5
Size at Final Surface of CCR, Ac.	4.3 @ EL. 1,058'	1.6 @ EL. 1,051'
Size at Final Surface of Covered CCR, Ac.	4.6 @ EL. 1,060'	1.7 @ EL. 1,053'
Water Capacity between Final Surface of CCR and Top of Embankment around the Cell, Ac.-Ft.	8.9	3.3
Average Annual Runoff, In.	4	4
Average Annual Evaporation, In.	59	59
Average Annual Precipitation, In.	42	42
Average Annual Runoff Volume, Ac.-Ft.	2.2	1.2
Average Annual Evaporation Volume at Final Surface of CCR, Ac.-Ft.	21.2	7.9
Average Annual Precipitation Volume within the Cell, Ac.-Ft.	16.0	6.0
Average Annual Runoff Volume Remaining within the Cell, Ac.-Ft.	0.0	0.0

TABLE 3

PERMANENT AND TEMPORARY SPECIES RATES, METHODS, AND PLANTING DATES 1 & 2/

Rate (lbs. PLS/Ac.)				
Species	Alone	Mixture	Method	Planting Dates
Permanent				
Guymon Bermudagrass	4	4	Broadcast	3/1 - 6/1
Common Lespedeza (Lespedeza striata)	20	10	Broadcast	9/15 - 10/15 3/15 - 4/1
Tall Fescue (Fescue arundinacea)	30	10	Broadcast	9/1 - 11/30 3/1 - 4/1
Perennial Ryegrass (Lolium perenne)	20	5	Broadcast	9/1 - 10/30 3/1 - 4/30
Temporary				
Italian Ryegrass (Lolium multiflorum)	50	10	Broadcast	9/1 - 10/30 3/1 - 4/30
Winter Rye (Secale cereale)	50	10	Broadcast	9/1 - 10/31 3/1 - 4/30
Wheat (Triticum aestivum)	50	15	Broadcast	9/1 - 11/30

1- Drilling is preferred.

2- The actual planting dates will fluctuate several days either way, depending on weather and soil conditions.

TABLE E.1

SITE DATA

2017 Worksheet for Calculating Closure and Post-closure Cost Estimates		
All site data necessary to calculate estimates of closure and post-closure costs can be gathered by completing table E.1.		
Data from Table E.1 should be inserted into Tables E.2 and F.1 to complete calculations.		
Table E.1: Site Data		
Facility Name:	Big Fork Ranch	
Permit Number:		
Description	Quantity	Units
Total Permitted Area	55	acres
Active Portion		
Composite Lined	None	acres
Soil Lined	6.3	acres
Area of Largest Cell/Phase Requiring Final Cap		
Composite Lined	None	acres
Soil Lined	6.3	acres
Perimeter Fencing	None	linear feet
Groundwater Monitoring Wells	170	VLF
Methane Gas Probes	None	VLF
Terraces	None	linear feet
Letdown channels	None	linear feet
Perimeter drainage ditches	2,300	linear feet
Average Daily Flow	N/A	tons/day
Landfill Disposal Cost	N/A	\$/ton
VLF = Vertical linear feet. The sum of the depths of all monitoring wells.		

TABLE E.2

CLOSURE COST ESTIMATE

Table E.2: Closure Cost Estimate						
Facility Name:						
Permit Number:						
	Task/Service	Quantity	Units	Multiplier^a	Unit Cost^b	Subtotal
1	Preliminary Site Work					
a	Conduct Site Evaluation	1	lump sum	1	\$3,562.60	\$3,562.60
b	Dispose Final Wastes					
	Average Daily Flow ^c	N/A	tons/day			
	Disposal Cost ^{d,e}	0	tons/day	5		\$0.00
c	Remove Temporary Building(s)	0	lump sum	1	\$3,266.92	\$0.00
d	Remove Equipment	0	lump sum	1	\$2,666.76	\$0.00
e	Repair/Replace Perimeter Fencing	0	linear feet	0.25	\$3.50	\$0.00
f	Clean Leachate Line(s)	0	lump sum	1	\$1,613.60	\$0.00
2	Monitoring Equipment					
a	Rework/Replace Monitoring Well(s)	170	VLF	0.25	\$74.92	\$3,184.10
b	Plug Abandoned Monitoring Well(s)	170	VLF	0.25	\$29.99	\$1,274.58
c	Rework/Replace Methane Probe(s)	0	VLF	0.25	\$64.70	\$0.00
d	Plug Abandoned Methane Probe(s)	0	VLF	0.25	\$23.64	\$0.00
e	Rework/Replace Remediation and/or Gas Control Equipment ^f	0	lump sum	0.05		\$0.00
3	Construction					
a	Complete Site Grading to include on- and off-site borrow areas	13	acres	1	\$1,412.48	\$18,362.24
b	Construct Final Cap					
	Compacted On-site Clay Cap or	15,246	cubic yards	1	\$5.08	\$77,449.68
	Compacted Off-site Clay Cap or	0	cubic yards	1	\$8.25	\$0.00
	Install Geosynthetic Clay Liner Cap	0	square feet	1	\$0.53	\$0.00
c	Construct Landfill Gas Venting Layer					
	Place Sand or	0	acres	1	\$37,768.24	\$0.00
	Install Net and Geotextile	0	square feet	1	\$0.37	\$0.00
d	Install Passive Landfill Gas Vents	0	acres	1	\$904.78	\$0.00
e	Install Flexible Membrane Liner	0	square feet	1	\$0.41	\$0.00
f	Drainage Layer					
	Place Sand or	0	acres	1	\$37,768.24	\$0.00
	Install Net and Geonet	0	square feet	1	\$0.37	\$0.00
g	Place On-site Topsoil	5,082	cubic yards	1	\$2.18	\$11,078.76
	Place Off-site Topsoil	0	cubic yards	1	\$17.45	\$0.00
h	Establish vegetative cover, including on- and off-site borrow areas	13	acres	1	\$661.31	\$8,597.03
4	Drainage/erosion control					
a	Construct Terraces	0	linear feet	1	\$9.14	\$0.00
b	Construct Letdown Channels	0	linear feet	1	\$100.00	\$0.00
c	Clean Perimeter Drainage Ditches	2,300	linear feet	0.5	\$6.96	\$8,004.00
5	Tasks Not Identified	0				\$0.00
6	Subtotal					
						\$131,512.99
7	Administrative Services ^g	1	lump sum	0.1	\$131,512.99	\$13,151.30
8	Technical and Professional Services ^g	1	lump sum	0.12	\$131,512.99	\$15,781.56
9	Closure Contingency ^g	1	lump sum	0.1	\$131,512.99	\$13,151.30
10	Total Final Closure^h					
						\$173,597.15
a	Multipliers are determined from the Solid Waste Financial Assurance Program Report, December 22, 2000.					
b	Unit costs include a 1.32% inflationary adjustment for 2017. Unit costs (Tasks 3h & 4b) have been updated per 2015 5-year evaluation (OAC 252:517-17-4). Task 3h unit cost will increase \$132.26 each year through the 2020 update.					
c	New facilities: Insert the value for "W" in OAC 252:515-27-8(a)(2). Existing facilities: Insert reported tonnage for the previous annual year, divided by 312 operating days per year (52 weeks per year x 6 operating days per week).					
d	Insert number of tons/day from above.					
e	Insert landfill disposal cost per ton of waste (\$/ton).					
f	Input capital cost for gas control/remediation equipment, if installed at the site.					
g	Input subtotal from line 6.					
h	Add rows 6 through 9.					

TABLE F.1

POST-CLOSURE COST ESTIMATE

Table F.1: Post-Closure Estimate						
Facility Name:						
Permit Number:						
	Task/Service	Quantity	Units	Multiplier^a	Unit Cost^b	Subtotal
1	Site maintenance					
a	Site Inspections	4	per year	30	\$648.07	\$77,768.40
				0	\$648.07	\$0.00
b	General Maintenance	1	per year	30	\$1,942.97	\$58,289.10
				0	\$1,942.97	\$0.00
c	Remediation and/or Gas Control Equipment ^{c,d}	0	lump sum	0.3		\$0.00
2	Monitoring equipment				0	
a	Rework/Replace Monitoring Well(s)	170	VLF	0.25	\$74.92	\$3,184.10
b	Plug Abandoned Monitoring Well(s)	170	VLF	0.25	\$29.99	\$1,274.58
c	Final Plugging of Monitoring Wells	170	VLF	1	\$29.99	\$5,098.30
d	Rework/Replace Methane Probe(s)	0	VLF	0.25	\$64.70	\$0.00
e	Plug Abandoned Methane Probe(s)	0	VLF	0.25	\$23.64	\$0.00
f	Final Plugging of Methane Probes	0	VLF	1	\$23.64	\$0.00
g	Final Plugging of Piezometer(s)	0	VLF	1	\$23.64	\$0.00
3	Sampling and analysis					
a	Groundwater Monitoring Wells ^e	5	wells	60	\$698.81	\$209,643.00
	C&D	0	wells	16	\$172.49	\$0.00
	Alt. Constituents	0	wells	60		\$0.00
b	Methane Gas Probes	0	probes	60	\$45.34	\$0.00
c	Surface Water Monitoring Points	0	points	60	\$84.22	\$0.00
d	Leachate	0	samples	60	\$135.71	\$0.00
4	Final cover maintenance					
a	Mow and Fertilize Vegetative Cover (MSWLF)	13	acres	30	\$214.39	\$83,612.10
	C&D LF	0		8	\$214.39	\$0.00
b	Repair Erosion, Settlement, and Subsidence for On-site Soils (MSWLF)	13	acres	30	\$3.11	\$1,212.90
	C&D LF	0		8	\$3.11	\$0.00
	Repair Erosion, Settlement, and Subsidence for Off-site Soils (MSWLF)	0	acres	30	\$18.59	\$0.00
	C&D LF	0		8	\$18.59	\$0.00
c	Reseed Vegetative Cover	13	acres	0.2	\$661.31	\$1,719.41
5	Leachate management					
a	Clean Leachate Line(s)	0	per year	30	\$1,661.85	\$0.00
b	Maintain Leachate Collection System and Equipment	0	per year	30	\$2,581.75	\$0.00
c	Collect, Treat, Transport, and Dispose of Leachate	0	gal/yr	30	\$0.33	\$0.00
6	Tasks not identified	0				\$0.00
7	Subtotal					\$441,801.89
8	Administrative Services^f	1	lump sum	0.06	\$441,801.89	\$26,508.11
9	Technical and Professional Services^f	1	lump sum	0.07	\$441,801.89	\$30,926.13
10	Post-closure Contingency^f	1	lump sum	0.1	\$441,801.89	\$44,180.19
11	Total Post-closure^g					\$543,416.32
a	Multipliers are determined from the Solid Waste Financial Assurance Program Report, December 22, 2000.					
b	Unit costs include a 1.32% inflationary adjustment for 2017. Unit costs (Task 4c) have been updated per 2015 5-year evaluation (OAC 252:517-17-4). Task 4c unit cost will increase \$132.26 each year through the 2020 update.					
c	5% of equipment capital cost, maintenance performed once per 5 yrs for 30 years.					
d	Input capital cost for gas control/remediation equipment, if installed at the site.					
e	If the approved groundwater monitoring plan requires monitoring for alternative constituents, unit costs shall be calculated in accordance with OAC 252:517-17-51(b) or (c).					
f	Input subtotal from line 7.					
g	Add lines 7 through 10.					

APPENDIX G

Maps and Drawings

LIST OF MAPS AND DRAWINGS

Map No.	Title
MP-1	General County Map
MP-2	Federal Emergency Management Agency (FEMA) Flood Plain Map
MP-3	U. S. G. S. Topographic Map (7.5 Minute)
MP-4	CCR Reclamation Plan Map
MP-5	Groundwater Resource & Usage Map
MP-6	Geology Map
MP-7A and MP-7B	Cross-Section Maps
MP-8	Potentiometric Surface Map
MP-9	Highest Historic Ground Water Elevation Map (During 2003 to 2016)
MP-10	Final Closure Map