

Sandy Creek Services, LLC

c/o Sandy Creek Energy Station
2161 Rattlesnake Rd.
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May 6, 2022

Mr. Charles Brown
Industrial and Hazardous Waste Permits Section, MC-130
Coal Combustion Residuals Program
Waste Permits Division
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Subject: Sandy Creek Energy Associates, LP – Riesel, McLennan County
CCR Registration No. CCR107
Response to Technical Notice-of-Deficiency 1
Tracking No. 27237612; CN604335455/RN105905657

Dear Mr. Brown:

Sandy Creek Services, LLC (Owner and Operator) is submitting this response to the April 26, 2022 Technical Notice-of-Deficiency (NOD) for the Sandy Creek Energy Station (Plant) CCR Waste Management Facility (Landfill) related to the Registration Application.

For ease of review, we have attached to this response letter your original comment table from your April 26, 2022 NOD letter/email with the response location and response statements provided in a separate column in the table. Additionally, attached to this response letter, we have included one original and two (2) unmarked copies, and one marked copy of all revised pages for use as replacement pages in the Registration Application. Where possible, we have identified proposed changes from the existing Registration Application in a redline/strike-out version (i.e., marked version). Additionally, we have included a revision date (May 2022) and revision number (Revision 1) on pages that have been revised as part of this NOD response. As requested in the NOD letter/email, a electronic copy of the landowner's mailing list is attached to this NOD response. This response has been posted on the publicly accessible internet website <http://www.sandycreekpower.net/registrationapplication>.

We appreciate your review of this Registration Application NOD response. If you or your staff have any questions please do not hesitate to contact us.

Sincerely,



Bryon Kohls
Project Director
Sandy Creek Services, LLC

Attachments: as described herein

cc: Dana Perry – Sandy Creek Services, LLC
Ryan Kuntz, P.E. – SCS Engineers
Brett DeVries, Ph.D., P.E. – SCS Engineers
TCEQ Region 9 Office

ATTACHMENT A

RESPONSE TABLE

Sandy Creek Energy Associates LP, Coal Combustion Residuals Registration No. CCR107
April 26, 2022 Notice-of-Deficiency Response Table

NOD ID	APP. Section	App. Sub Section	Location	Citation	NOD Description	Response
1	--	--	--	Application Cover Sheet, Section I, p.1	This facility has been assigned the registration identification number: CCR107. Use this ID number to reference this application in future correspondence.	The Registration Application has been revised to include “TCEQ Registration No. CCR107” where applicable throughout the application (e.g., cover pages, table of contents, etc.), and minor revisions were made to the cover pages for consistency throughout the application.
2	I	I.13	--	30 TAC 352.231(g), 330.59(d)(2)	Revise the property owner affidavit to replace “municipal solid waste landfill capacity” with “Coal Combustion Residual Facility”; and remove the reference to Chapter 330. We have attached for your assistance a sample affidavit for your use.	It should be noted that a property owner affidavit was not included in the original submitted; however, to address this comment we have added the property owner affidavit to Appendix I.C - Legal Authority and Section 2.5 of Part I - General Registration Application Requirements was revised to include a reference to the property owner affidavit, in accordance with 30 TAC352.231(g) and 330.59(d)(2).
3	I	I.20	[Drawing I.B-6]	Application Instructions 30 TAC 352.231(e) 330.59(c)	Revise the landowners list and map to include all individuals that have mineral interest under the facility.	As indicated in Note 2 on Drawing I.B-6 and Section 3 of Part I - General Registration Application Requirements, based on an online review of McLennan County Appraisal District’s property records, as of October 2021, McLennan County did not identify mineral interest in its online real property appraisal records. As a result, no revisions were required or made to the landowners list and map.
4	I	I.20	--	Application Instructions 30 TAC 352.461 39.405(b), 330.59(c)	Provide pre-printed mailing labels or an electronic mailing list for the landowners.	A hard copy of the mailing labels for the landowner mailing list was provided with the initial Registration Application; however, an electronic mailing list (in the property label format (AVERY 5160), with no punctuation, and in all caps) is provided in Attachment D. In addition, duplicate landowners have been removed from the list.
5	I	I.18	--	Application Instructions	Provide the Core Data Form (TCEQ - 10400)	The Core Data Form (TCEQ-10400) has been added to Appendix I.A - Application Forms
6	I	I.6	Table I.6.A	Application Instructions	Indicate if the Volume (tons/year) is the maximum or average expected volume.	Table I.6.A - Waste Management Information was revised to be consistent with Table 2-1 Waste Streams and Acceptance Rates. The revision clarifies that the volume specified in Table I.6.A is the “Expected Maximum Annual Waste Acceptance Rate.”
7	I	I.6	Table I.6.C	Application Instructions	Complete the information in the table assuming the waste will must be resampled, retested, and reclassified when there is a change in the process. “Change in the process” can be used as frequency for sampling of waste.	Table I.6.C - Sampling and Analytical Methods was revised to include a reference to Note 3 (previously included in the Registration Application), which indicates that “the Owner/Operator will obtain waste classification prior to disposal of waste within the landfill and after a process change that results

Sandy Creek Energy Associates LP, Coal Combustion Residuals Registration No. CCR107
April 26, 2022 Notice-of-Deficiency Response Table

NOD ID	APP. Section	App. Sub Section	Location	Citation	NOD Description	Response
						in the generation of waste that changes the waste classification.” Also note that the fourth paragraph in Section 2.2 of Part I – General Registration Application Requirements has the same requirements when there is a change in the process. In addition, the sampling location for Waste No. 4 in Table I.6.C was revised to correctly indicate the sample location (i.e., Selective Catalytic Reduction (at Plant))”

ATTACHMENT B

REGISTRATION APPLICATION REVISIONS (MARKED)

Sandy Creek Energy Station
Coal Combustion Residual Waste
Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

Volume 1 of 2

Prepared for
Sandy Creek Services, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

SCS ENGINEERS

SCS Project No. 162210590.00 | Revision ~~0-1~~ – ~~January-May~~ 2022

1901 Central Drive, Suite 550
Bedford, Texas 76021
817.571.2288

Sandy Creek Energy Station
Coal Combustion Residual Waste Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART I
GENERAL REGISTRATION APPLICATION REQUIREMENTS**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
P.O. Box 370
Riesel, TX 76682



Prepared by:

SCS ENGINEERS
Texas Board of Professional Engineers, Reg. No. F-3407
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Revision 0 – January 2022
Revision 1 – May 2022
SCS Project No. 16221059.00

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1 INTRODUCTION

Sandy Creek Services, LLC (Owner and Operator) propose to continue development and operation of the Sandy Creek Energy Station (Plant) Coal Combustion Residual (CCR) Waste Management Facility (Landfill) located in McLennan County, Texas. The Plant is a nominal 1,000 MW coal-fired generation unit. The Landfill comprises a waste footprint of 40.7 acres located on 149.3 acres of land (Landfill Registration Boundary) within the overall 697.8-acre property boundary on which the Plant and Landfill are co-located. The Landfill Registration Boundary, including Landfill and associated support facilities, is located on the southwest corner of the Plant's overall property boundary. The Plant and Landfill are both accessed from Farm-to-Market [FM] 1860 via Rattlesnake Road, through a gated entrance located west of the Plant, as shown on Drawing I.B-1 – Site Location Map.

The primary wastes disposed of in the Landfill are fly ash and bottom ash generated during the coal combustion process at the Plant. Additionally, other Class 2 and Class 3 waste generated at the Plant are disposed of at the Landfill. At the time of preparing this Landfill Registration Application (Application), Cells 1 and 2 are existing active cells constructed in 2010 and 2014, respectively. A portion of Cell 3 (inclusive of Subcells 3A through 3D) was constructed in 2021 prior to and during the time of preparing for this Application. Future subcells within Cell 3 will be constructed and operated consistent with this Application. The Landfill was issued Solid Waste Registration Number 88448 and EPA ID TXR000079082 with the initial Registration on December 12, 2007 and subsequently TCEQ issued registration identification number CCR107 in April 2022.

This Application has been prepared consistent with Title 30 of the Texas Administrative Code (30 TAC), Chapter 352 and such provisions of Title 40 of the Code of Federal Regulations (40 CFR), Part 257 as incorporated by reference in the Chapter 352 rules. In accordance with 30 TAC §352.231(f), the design, construction, and operation of the Landfill, as outlined in this Application, meets the requirements of 30 TAC §352.2.

The outline of this Application generally follows the structure of TCEQ Form 20870. Part I, Section 2, General Information, presents an overview of the Application, a detailed Landfill description, and the types of waste that will be accepted at the Landfill. The remaining portions of the Part I narrative presents information on specific existing and future conditions on and around the Landfill, provides a description of the entities involved in the application process, and summarizes the application content and compliance with TCEQ regulations that is provided in Parts II through VIII of the Application. As such, this Application is comprised of the following:

- Part I – General Registration Application Requirements, including Appendix I.A – Application Forms
- Part II – Location Restriction Demonstration
- Part III – Fugitive Dust Control Plan
- Part IV – Landfill Criteria, including Landfill Design Drawings, Appendix IV.A – Leachate Collection and Removal System Plan, Appendix IV.B – Liner Construction Quality Assurance Plan, and Appendix IV.C – Run-on and Run-off Control System Plan

leachate evaporation pond; and groundwater monitoring wells. These features are depicted on Drawings I.B-2 and I.B-4.

There are two (2) known easements within the Landfill Registration Boundary, including a drainage and electrical easement, as shown on the property and legal description of the Landfill Registration Boundary (Appendix I.B). The drainage easement is under the jurisdiction of McLennan County and the electrical easement is under the jurisdiction of Navasota Valley Electric Cooperative, Inc.

As described in Section 4.6, a portion of the Landfill Registration Boundary is within the 100-year floodplain. However, the existing and future waste disposal footprints are located entirely outside the limits of the 100-year floodplain. The 100-year floodplain is shown on Drawings I.B-4.

No waste storage, processing, or disposal is proposed within the drainage easement, electrical easement, or the 100-year floodplain.

2.4 OTHER PERMITS/AUTHORIZATIONS

Table 2-2 lists existing permits or construction approvals at the time of this Application development that are related to the Landfill.

Table 2-2 Permits and Construction Approvals

PERMIT PROGRAM	LANDFILL APPLICABILITY
Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	TCEQ Solid Waste Registration No.: 88448 <u>CCR107</u> EPA ID No.:TXR000079082
Underground Injection Control Program under the Texas Injection Well Act	N.A.
National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	Texas Permit No.: WQ0004755000 EPA ID No.: TX0127256
Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA). Nonattainment Program under the FCAA	TCEQ Permit No. 70861
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA	TCEQ Permit No. 70861

Notes:

1. N.A.: not applicable

2.5 LEGAL AUTHORITY

Verification of legal status for the two entities having over 20 percent ownership in the Landfill (Brazos Sandy Creek Electric Cooperative, Inc. and Sandy Creek Energy Associates, L.P) and property affidavit are ~~is~~ provided in Appendix I.C – Legal Authority.

2.6 GENERAL MAPS (30 TAC §352.231(E))

In accordance with 30 TAC §352.231(e), general layout drawings are provided in Appendix I.B, including the following:

- Site Location Map,
- General Topographic and Surrounding Features Map,
- Aerial Photograph,
- Facility Layout Map, and
- Land Ownership Map.

APPENDIX I.A
APPLICATION FORMS



Texas Commission on Environmental Quality

Registration Application for Coal Combustion Residuals (CCR) Waste Management

I. General Information

1. Reason for Submittal

Type of Registration Application

- ☒ New ☐ Major Amendment ☐ Minor Amendment
☐ Notice of Deficiency (NOD) Response ☐ Transfer ☐ Name Change
☐ Other

2. Application Fees

☒ \$150 Application Fee

Payment Method

☐ Check ☒ Online through ePay portal <www3.tceq.texas.gov/epay/>

If paid online, enter ePay Trace Number: 582EA000458289

3. Facility Information

Facility information must match regulated entity information on the Core Data Form.

Applicant: ☐ Owner ☐ Operator ☒ Owner/Operator

Facility TCEQ Solid Waste Registration No: CCR10788448

Facility EPA ID: TXR000079082

Regulated Entity Reference No. (if issued): RN 105905657

Facility Name: Sandy Creek Energy Station Coal Combustion Residual Waste Management Facility

Facility (Area Code) Telephone Number: (254) 896-4317

Facility physical street address (city, state, zip code, county): 2157 Rattlesnake Road

Facility mailing address (city, state, zip code, county): Riesel, Texas, 76682, McLennan

Latitude (Degrees, Minutes Seconds): 31° 28' 27"

Longitude (Degrees, Minutes Seconds): -96° 57' 18"

Tables

Tables	Submitted	Not Applicable
Table I.6. - CCR Waste Management Units	☒	☐
Table I.6.A. - Waste Management Information	☒	☐
Table I.6.B. - Wastes Managed in Registered Units	☒	☐
Table I.6.C. - Sampling and Analytical Methods	☒	☐
Table IV.A. - Landfill Characteristics	☒	☐
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Table IV.C. - Landfill Leachate Collection System	☒	☐
Table IV.D. - Inspection Schedule of Landfills	☒	☐
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Table VIII.B. - Post-Closure Period	☐	☒
Engineering Certification(s) - Dike Construction	☐	☒

Additional Attachments as Applicable - Select all those apply and add as necessary

- ☒ TCEQ Core Data Form(s)
- ☐ Signatory Authority Delegation
- ☒ Fee Payment Receipt
- ☐ Confidential Documents
- ☐ Certificate of Fact (Certificate of Incorporation)
- ☐ Assumed Name Certificate

Table I.6. – CCR Waste Management Units

CCR Unit No. ¹	Unit Name	N.O.R. No. ¹	Unit Description ³	Capacity	Unit Status ²
002	Sandy Creek Energy Station CCR Waste Management Facility	88448 <u>CCR107</u>	CCR Landfill	3,870,000 CY	Active

1 Registered Unit No. and N.O.R. No. cannot be reassigned to new units or used more than once.

2 Unit Status options: Active, Closed, Inactive (built but not managing waste), Proposed (not yet built), Never Built, Transferred, Post-Closure.

3 If a unit has been transferred, the applicant should indicate which facility/permit it has been transferred to in the Unit Description column.

Table I.6.A. – Waste Management Information

Waste No. ¹	Waste Type(s)	Source	Volume Expected <u>Maximum Annual</u> <u>Waste Acceptance Rate</u> (tons/year)
1	Fly ash	Generated during the coal combustion process at the Plant and collected in the SDA and Fabric Filter	284,000
2	Bottom ash	Generated during the coal combustion process at the Plant	48,000
3	Filter cake from the water treatment building	Generated from the filtering water at the treatment building	500
4	Spent SCR catalyst	Generated from the select catalytic reduction (SCR) system used at the Plant to reduce nitrogen oxide emissions	400
5	Class 2 spent demineralizer resin	Generated from the Plant's process water treatment system	15
6	Cooling tower sediments and cooling water screenings	Generated from the condenser and cooling tower as a result of the heat developed during the process of boiling water at the Plant	1
7	Spent resin	Generated from the Plant's process water treatment system	15

1 Assign waste number sequentially. Do not remove waste number wastes which are no longer generated.

Table I.6.C – Sampling and Analytical Methods

Waste No. ¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
1	Fly Ash Silo (at Plant)	See Note 2	See Notes <u>2</u> & <u>3</u>	See Note 4	See Note 4	See Note 4
2	Bottom ash storage (at Plant)					
3	Process Water Treatment System (at Plant)					
4	Selective Catalytic Reduction Reactor (at Plant)					
5	Process Water Treatment System (at Plant)					
6	Condenser and Cooling Tower (at Plant)					
7	Process Water Treatment System (at Plant)					

1 from Table I.6.A., first column

2 Waste classification and sampling methods are based on Toxic Characteristic Leaching Procedure (TCLP) and/or Process knowledge.

3 The Owner/Operator will obtain waste classification prior to disposal of waste within the landfill and after a process change that results in the generation of waste that changes the waste classification.

4 Parameters, test methods, and desired accuracy levels will be in accordance with TCEQ's Guidelines for the Classification and Coding of Industrial and Hazardous Waste.

Registration No.: ~~-----~~CCR107
Registrant: Sandy Creek Energy Station

Table IV.A. – Landfills Characteristics

Registered Unit No.	Landfill	N.O.R. No.	Waste Nos. ¹	Rated Capacity	Dimensions ²	Distance from lowest liner to groundwater	Action Leakage Rate (if required)	Unit will manage CCR Waste and non-CCR Waste (state all that apply)
002	Sandy Creek Energy Station CCR Waste Management Facility	88448 CCR107	1 - 8	3,870,000 CY	Approx. 1,200 ft E-W, 1,500 ft N-S 138 ft Depth 40.7 acres - area	Greater than 1.52 meters (five feet), see note 3	N/A	CCR and non-CCR Waste (see Table I.6.B)

1 From Table I.6.A., first column

2 Dimensions should be provided as average length, width and depth, also include the surface acreage for the unit.

3 The shallowest geologic formation beneath the Landfill Registration Boundary that is capable of providing usable quantities of water is the Trinity Aquifer, located approximately 1,000 feet below the Landfill.

Table IV.B. – Landfill Liner System

Registered Unit No.*	Landfill	Geomembrane Liner Material	Geomembrane Liner Permeability (cm/sec)	Geomembrane Liner Thickness	Soil Liner Material	Soil Liner Permeability (cm/sec)	Soil Liner Thickness
002 – Cell 1	Sandy Creek Energy Station CCR Waste Management Facility	N/A	N/A	N/A	Compacted Clay	$k \geq 1 \times 10^{-7}$	3 - feet
002 – Cell 2		N/A	N/A	N/A	Compacted Clay	$k \geq 1 \times 10^{-7}$	3 - feet
002 – Cell 3		HDPE – Textured both sides	4×10^{-13}	60-mil	Compacted Clay	$k \geq 1 \times 10^{-7}$	2 - feet

* This number should match the Registration Unit No. given on Table IV.A.

Table IV.C. – Landfill Leachate Collection System

Registered Unit No.	Landfill Name	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material
002 – Cell 1	Sandy Creek Energy Station CCR Waste Management Facility	Leachate collection Trench - Drainage aggregate wrapped in 6.5 oz./sy geotextile	4"Ø HDPE SDR 17 leachate collection pipe	6.5 oz./sy geotextile wrapped around drainage aggregate in leachate collection trenches	N/A	N/A – gravity drain to leachate evaporation pond
002 – Cell 2		Floor/Sidewall – 200- mil geocomposite (double-sided) Leachate collection trench – drainage aggregate wrapped in 8 oz./sy geotextile	6"Ø HDPE SDR 11 leachate collection pipe and 24" Ø HDPE SDR 11 sump riser pipe	8 oz./sy geotextile wrapped around drainage aggregate and leachate collection pipe in leachate collection trenches and leachate sump	N/A	Drainage aggregate wrapped in 8 oz./sy geotextile
002 – Cell 3		Floor/Sidewall – 270-mil geocomposite (double-sided) Leachate collection trench – drainage aggregate wrapped in 12 oz./sy geotextile	6"Ø HDPE SDR 9 leachate collection pipe and 18" Ø HDPE SDR 11 sump riser pipe	12 oz./sy geotextile wrapped around drainage aggregate and leachate collection pipe in leachate collection trenches and leachate sump	N/A	Drainage aggregate wrapped in 12 oz./sy geotextile

Table IV.D. – Inspection Schedule of Landfills

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Unit 002 - Waste Spilled in route to landfill	Waste spilled in route to landfill.	Daily
Unit 002 - Landfill Structure and Slope	Sloughing, slumping, sliding, surface cracking, sinkholes, excessively steep slope, toe of slope movement, and vehicle damage.	Weekly
Unit 002 - Landfill Access Roads	Damage from vehicle traffic and erosion.	Monthly
Unit 002 - Intermediate Cover	Improper placement, thickness, erosion, vegetation, animal burrows, and for presence of waste or other contamination.	Weekly
Unit 002 - Final Cover	Improper placement, thickness, erosion, vegetation, animal burrows, and for presence of waste or other contamination.	Monthly
Unit 002 - Dust Emissions	Fugitive dust at the landfill and from haul trucks	Daily
Unit 002 - Erosion Control	Erosion of intermediate and final cover	Weekly (Interim), Monthly (Final)
Unit 002 - Ponding Water	Ponding water on landfill cover.	Weekly
Unit 002 - Run-on and Run-off Control Systems (Uncontaminated and Contact Water)	Damage to diversion berms, downchutes, perimeter drainage channels, culverts, detention basin(s) for damage.	Weekly
Unit 002 - Leachate Collection and Removal System	Damage to leachate riser pipes, sump pump/controls, and evaporation pond for damage and height of freeboard in the pond.	Weekly
	Damage to isolation valves, protective cover, exposed geosynthetics, and leachate evaporation pond underdrain system for damage or blockage.	Monthly
Unit 002 - Groundwater Monitoring System	Damage, excess vegetation, and other deficiencies to the groundwater monitoring wells..	Monthly

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Table V.A. – Surface Impoundment Characteristics

Registered Unit No.	Surface Impoundment Name	N.O.R. No.	Waste Nos. ¹	Rated Capacity	Dimensions ²	Distance from lowest liner to groundwater	Action Leakage Rate (if required)	Unit will manage CCR Waste and non-CCR Waste (state all that apply)
N/A								

1 From Table I.6.A., first column

2 Dimensions should be provided as average length, width and depth, also include the surface acreage for the unit.

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Table V.B. – Surface Impoundment Liner System

Registered Unit No.*	Surface Impoundment Name	Geomembrane Liner Material	Geomembrane Liner Permeability (cm/sec)	Geomembrane Liner Thickness	Soil Liner Material	Soil Liner Permeability (cm/sec)	Soil Liner Thickness
N/A							

* This number should match the Registration Unit No. given on Table V.A.

Registration No.: ~~-----~~CCR107
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Table V.J. - Inspection Schedule of Surface Impoundments

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
N/A		

Table VI.A. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Sandy Creek Energy Station CCR Waste Management Facility					
Well Number(s):	BW-1	MW-1	MW-2	MW-3	MW-4	MW-5
Hydrogeologic Unit Monitored	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations
Type (e.g., point of compliance, background, observation, etc.)	Background)	Point of compliance	Point of compliance	Point of compliance	Point of compliance	Point of compliance
Up or Down Gradient	Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Casing Diameter and Material	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC
Screen Diameter and Material	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC
Screen Slot Size (in.)	0.010	0.010	0.010	0.010	0.010	0.010
Top of Casing Elevation (Ft, Mean Sea Level [MSL])	485.57	465.87	442.15	430.06	436.91	454.52
Grade or Surface Elevation (Ft, MSL)	482.70	462.85	439.18	427.09	433.73	451.70
Well Depth (Ft, Below Grade Surface [BGS])	38.63	34.23	19.63	16.23	30	35
Well Depth (Ft, Below Top of Casing [BTOC])	41.5	37.25	22.6	19.2	33.66	38.29
Screen Interval From (Ft, BGS) To (Ft, BGS)	From 28.30 To 38.30	From 23.89 To 33.89	From 9.3 To 19.3	From 5.9 To 15.9	From 20 To 30	From 25 To 35
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	From 31.17 To 41.17	From 26.91 To 36.91	From 12.27 To 22.27	From 8.87 To 18.87	From 23.66 To 33.66	From 28.29 To 38.29

¹ From Tables in Section I.; MSL: Mean Sea Level; BGS: Below Grade Surface; BTOC: Below Top of Casing

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Table VI.C. – CCR Units Under Detection Monitoring

N.O.R. Unit No.	Unit Description ^{1,2}	Well(s)	Constituent(s)	Date of SSI Determination	Date of Assessment Monitoring Notification ³
88448 CCR107	CCR Landfill	BW-1, MW-1, MW-2, MW-3	Appendix III	NA	NA

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year.

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Table VI.D. – CCR Units Under Assessment Monitoring

N.O.R. Unit No.	Unit Description ^{1,2}	Well(s)	Constituent(s)	Date of SSI Determination	Date of Assessment Monitoring Notification ³
N/A					

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year

Table VI.D-2. – Groundwater Detection Monitoring Parameters

Parameter	Sampling Frequency	Analytical Method	Practical Quantification Limit (units)	Concentration Limit ¹
Boron	Semiannual	6010B	0.200	See Note 2
Calcium	Semiannual	6010B	5.00	See Note 2
Chloride	Semiannual	9056	25.0	See Note 2
Fluoride	Semiannual	9056	0.500	4.0
pH	Semiannual	9040C	0.100	See Note 2
Sulfate	Semiannual	9056	25.0	See Note 2
Total Dissolved Solids	Semiannual	160.1	10.0	See Note 2

1 The concentration limit is the basis for determining whether a release has occurred from the CCR unit/area.

2 MCL does not exist

Table VII.A.1. - Unit Closure

For each unit to be registered, list the unit components to be decontaminated, the possible methods of decontamination, and the possible methods of disposal of wastes and waste residues generated during unit closure.

Equipment or CCR Unit	Possible Methods of Decontamination ¹	Possible Methods of Disposal ¹
CCR Unit 002	Waste left in-place and installation of final cover	N/A
Landfill equipment	Wash off excessive waste material from equipment within landfill (active face)	N/A

¹ Applicants may list more than one appropriate method.

Table VII.A.2. – CCR Units Under Alternative Closure Notification

Registered Unit No.	N.O.R. Unit No.	Unit Description ^{1,2}	Date of Receipt of Last Waste ³	Date of Closure Notification ³
N/A				

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year.

Table VIII.A.1. – Post-Closure Cost Summary for Existing Registered Units

Unit	Cost
1.0 Engineering:	
1.1 Site Inspection: Security (signs and fencing, benchmarks, final cover)	\$2,986
1.2 Correctional Plans and Specifications (engineering plans to correct erosion issues every other year)	\$8,500
2.0 Site Monitoring:	
2.1 Groundwater Sampling and Analysis (6 wells x 2 sampling events/yr)	\$18,000
2.2 Groundwater Well Plugging and Abandonment	\$200
3.0 Construction and Maintenance:	
3.1 Cap and Sideslope Repairs and Revegetation	\$1,700
3.2 Mowing and Vegetation Management	\$3,400
3.3 Groundwater Monitoring system Maintenance	\$2,500
3.4 Perimeter Fence and Gates Maintenance	\$1,500
3.5 Access Roads Maintenance	\$4,500
3.6 Drainage System Cleanout/Repairs	\$3,500
4.0 Leachate Management:	
4.1 Leachate Management System Operation and Maintenance	\$5,000
4.2 Decommissioning of Existing leachate Evaporation Pond	\$2,333
4.3 Contaminated leachate disposal-profiling, transportation and disposal (all leachate discharged into evaporation pond)	N/A
5.0 Administration:	
5.1 Annual Report Preparation and Submittal to TCEQ	\$4,500
Subtotal	\$58,619
10% Contingency	\$5,862
Third Party Administration and Project Management (2.5% of Subtotal)	\$1,465
Estimated Annual PCC Cost Total	\$ 65,946 (2021 dollars)
30 Year Post-Closure Costs	\$ 1,978,380 (2021 dollars)

Table VIII.A.2. - Post-Closure Cost Summary for Proposed Registered Units

Unit	Cost
1.0 Engineering:	
1.1 Site Inspection: Security (signs and fencing, benchmarks, final cover)	N/A
1.2 Correctional Plans and Specifications (engineering plans to correct erosion issues every other year)	\$1,675
2.0 Site Monitoring:	
2.1 Groundwater Sampling and Analysis (6 wells x 2 sampling events/yr)	N/A
2.2 Groundwater Well Plugging and Abandonment	N/A
3.0 Construction and Maintenance:	
3.1 Cap and Sideslope Repairs and Revegetation	\$340
3.2 Mowing and Vegetation Management	\$670
3.3 Groundwater Monitoring system Maintenance	N/A
3.4 Perimeter Fence and Gates Maintenance	N/A
3.5 Access Roads Maintenance	N/A
3.6 Drainage System Cleanout/Repairs	N/A
4.0 Leachate Management:	
4.1 Leachate Management System Operation and Maintenance	N/A
4.2 Decommissioning of Existing leachate Evaporation Pond	N/A
4.3 Contaminated leachate disposal-profiling, transportation and disposal (all leachate discharged into evaporation pond)	N/A
5.0 Administration:	
5.1 Annual Report Preparation and Submittal to TCEQ	N/A
Subtotal	\$2,685
10% Contingency	\$269
Third Party Administration and Project Management (2.5% of Subtotal)	\$67
Estimated Annual PCC Cost Total	\$ 3,021 (2021 dollars)
30 Year Post-Closure Costs	\$ 90,630 (2021 dollars)

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- 1 As units are added or deleted from these tables through future registration amendments, the remaining itemized unit costs should be updated for inflation when re-calculating the revised total cost in current dollars.

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Table VIII.B. – Post-Closure Period

Unit Name	Date Certified Closed	Authorized Post-Closure Period (Yrs.)	Earliest Date Post-Closure Ends (See Note 1)
Sandy Creek Energy Station CCR Waste Management Facility	N/A	30 years	N/A

Note 1 – Post-Closure Care shall continue beyond the specified date until the Executive Director has approved the applicant's request to reduce or terminate the post-closure period, consistent with 30 TAC §352.1241 – Post-Closure Care Requirements.

Registration No.: ~~----~~CCR107
Registrant: Creek Energy Station

Surface Impoundments: Dike Construction – Not Applicable

For each surface impoundment dike, complete the following information:

"I, _____(licensed Professional Engineer), Texas P.E. License Number _____, of
Registered Firm _____(Name), Registered Firm No. _____ (Registration Number),
certify under penalty of law that I have personally examined and am familiar with the design
and construction of the dikes that are a portion of _____ (surface impoundment unit name).

I further certify that I have evaluated the dike design and materials of construction
using accepted engineering procedures, and have determined that the dike, including the
portion of the dike providing freeboard, has structural integrity, and is constructed in
accordance with applicable surface impoundment criteria per the following:

_____ Existing Diked Surface Impoundment - [40 CFR 257.73\(a\)\(1\) through \(4\)](#) and [30 TAC Section 352.731](#).

_____ New or Lateral Diked Surface Impoundment - [40 CFR 257.74\(a\)\(1\) through \(4\)](#) and [30 TAC Section 352.741](#).

Date: _____"

"(Signature)"

"(Seal)"

**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. ~~----~~CCR107
McLENNAN COUNTY, TEXAS**

**PART II
LOCATION RESTRICTION DEMONSTRATION**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

Prepared by:

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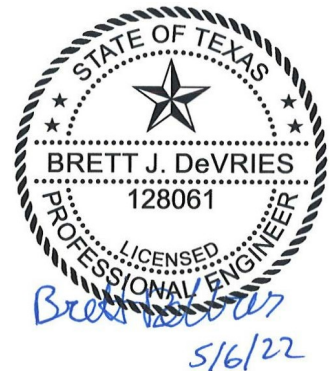


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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. ~~---~~CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX II.B3
SETTLEMENT CALCULATIONS**

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COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. —CCR107
McLENNAN COUNTY, TEXAS**

**PART III
FUGITIVE DUST CONTROL PLAN**

Prepared for:

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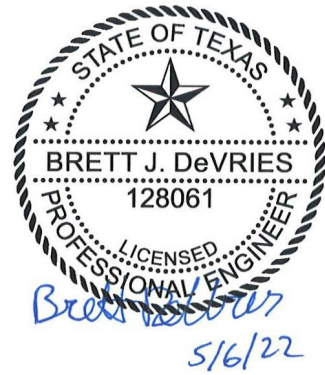


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McLENNAN COUNTY, TEXAS**

**PART IV
LANDFILL CRITERIA AND DESIGN DRAWINGS**

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COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
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McLENNAN COUNTY, TEXAS**

**APPENDIX IV.A
LEACHATE COLLECTION AND REMOVAL SYSTEM PLAN**

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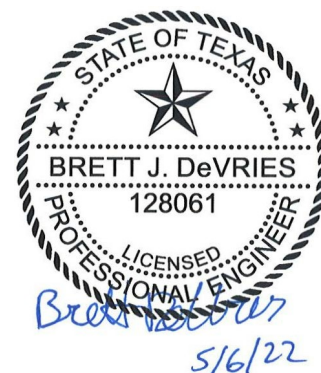
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**ATTACHMENT IV.A1
LEACHATE GENERATION MODEL**

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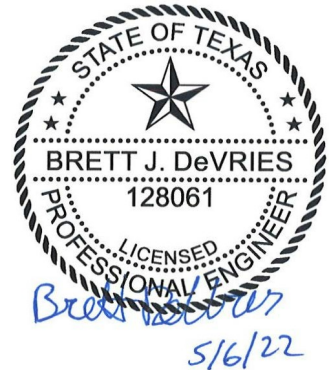


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McLENNAN COUNTY, TEXAS**

**APPENDIX IV.B
LINER CONSTRUCTION QUALITY ASSURANCE PLAN**

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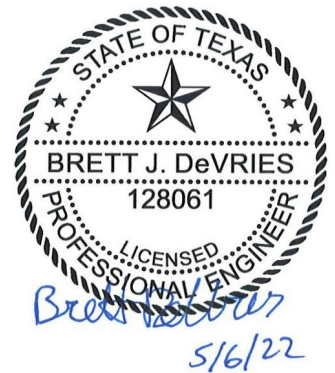
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
~~TCEQ REGISTRATION NO. -----REGISTRATION APPLICATION~~
~~TCEQ REGISTRATION NO. -----CCR107REGISTRATION APPLICATION~~
McLENNAN COUNTY, TEXAS**

**PART IV, APPENDIX IV.C
RUN-ON AND RUN-OFF CONTROL SYSTEM PLAN**

Prepared for:

SANDY CREEK SERVICES, LLC
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Prepared by:

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Sandy Creek Energy Station
Coal Combustion Residual Waste
Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

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Sandy Creek Energy Station
Coal Combustion Residual Waste Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. ~~---~~CCR107
McLENNAN COUNTY, TEXAS**

**PART V
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COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. ---CCR107
McLENNAN COUNTY, TEXAS**

**PART VI
GROUNDWATER MONITORING AND
CORRECTIVE ACTION PLAN**

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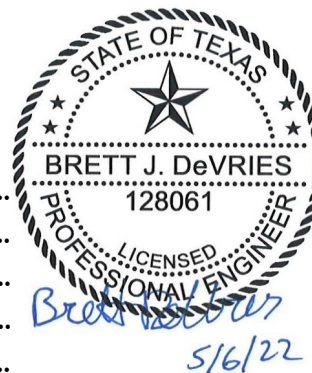


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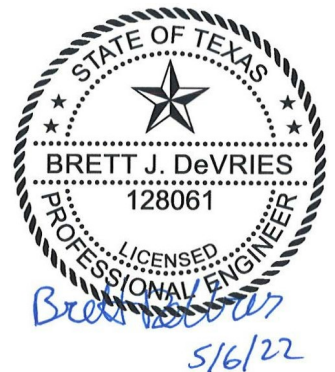
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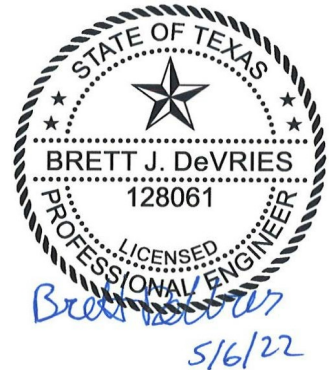


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COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. ~~----~~CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX VI.A
GROUNDWATER SAMPLING AND ANALYSIS PLAN**

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REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART VII
CLOSURE AND POST-CLOSURE CARE PLAN**

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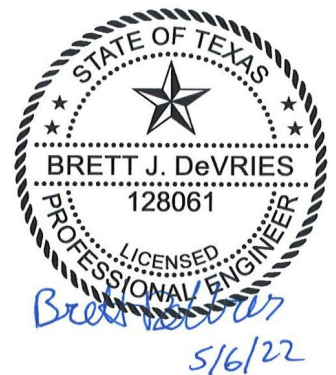
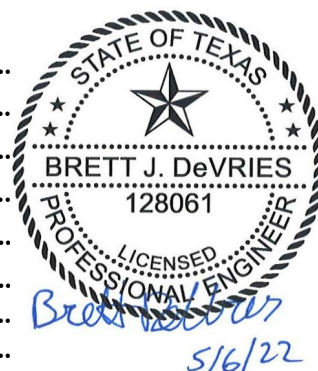


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McLENNAN COUNTY, TEXAS**

**PART VIII
POST-CLOSURE CARE COST ESTIMATE AND FINANCIAL ASSURANCE**

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REGISTRATION APPLICATION REVISIONS (UNMARKED)

Sandy Creek Energy Station
Coal Combustion Residual Waste
Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

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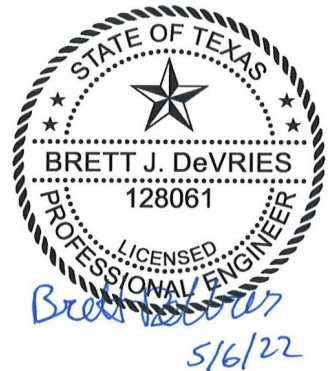
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART I
GENERAL REGISTRATION APPLICATION REQUIREMENTS**

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Part IV – Landfill Criteria and Design Drawings

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Part VIII – Post-Closure Care Cost Estimate and Financial Assurance Mechanism

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1 INTRODUCTION

Sandy Creek Services, LLC (Owner and Operator) propose to continue development and operation of the Sandy Creek Energy Station (Plant) Coal Combustion Residual (CCR) Waste Management Facility (Landfill) located in McLennan County, Texas. The Plant is a nominal 1,000 MW coal-fired generation unit. The Landfill comprises a waste footprint of 40.7 acres located on 149.3 acres of land (Landfill Registration Boundary) within the overall 697.8-acre property boundary on which the Plant and Landfill are co-located. The Landfill Registration Boundary, including Landfill and associated support facilities, is located on the southwest corner of the Plant's overall property boundary. The Plant and Landfill are both accessed from Farm-to-Market [FM] 1860 via Rattlesnake Road, through a gated entrance located west of the Plant, as shown on Drawing I.B-1 – Site Location Map.

The primary wastes disposed of in the Landfill are fly ash and bottom ash generated during the coal combustion process at the Plant. Additionally, other Class 2 and Class 3 waste generated at the Plant are disposed of at the Landfill. At the time of preparing this Landfill Registration Application (Application), Cells 1 and 2 are existing active cells constructed in 2010 and 2014, respectively. A portion of Cell 3 (inclusive of Subcells 3A through 3D) was constructed in 2021 prior to and during the time of preparing for this Application. Future subcells within Cell 3 will be constructed and operated consistent with this Application. The Landfill was issued Solid Waste Registration Number 88448 and EPA ID TXR000079082 with the initial Registration on December 12, 2007 and subsequently TCEQ issued registration identification number CCR107 in April 2022.

This Application has been prepared consistent with Title 30 of the Texas Administrative Code (30 TAC), Chapter 352 and such provisions of Title 40 of the Code of Federal Regulations (40 CFR), Part 257 as incorporated by reference in the Chapter 352 rules. In accordance with 30 TAC §352.231(f), the design, construction, and operation of the Landfill, as outlined in this Application, meets the requirements of 30 TAC §352.2.

The outline of this Application generally follows the structure of TCEQ Form 20870. Part I, Section 2, General Information, presents an overview of the Application, a detailed Landfill description, and the types of waste that will be accepted at the Landfill. The remaining portions of the Part I narrative presents information on specific existing and future conditions on and around the Landfill, provides a description of the entities involved in the application process, and summarizes the application content and compliance with TCEQ regulations that is provided in Parts II through VIII of the Application. As such, this Application is comprised of the following:

- Part I – General Registration Application Requirements, including Appendix I.A – Application Forms
- Part II – Location Restriction Demonstration
- Part III – Fugitive Dust Control Plan
- Part IV – Landfill Criteria, including Landfill Design Drawings, Appendix IV.A – Leachate Collection and Removal System Plan, Appendix IV.B – Liner Construction Quality Assurance Plan, and Appendix IV.C – Run-on and Run-off Control System Plan

leachate evaporation pond; and groundwater monitoring wells. These features are depicted on Drawings I.B-2 and I.B-4.

There are two (2) known easements within the Landfill Registration Boundary, including a drainage and electrical easement, as shown on the property and legal description of the Landfill Registration Boundary (Appendix I.B). The drainage easement is under the jurisdiction of McLennan County and the electrical easement is under the jurisdiction of Navasota Valley Electric Cooperative, Inc.

As described in Section 4.6, a portion of the Landfill Registration Boundary is within the 100-year floodplain. However, the existing and future waste disposal footprints are located entirely outside the limits of the 100-year floodplain. The 100-year floodplain is shown on Drawings I.B-4.

No waste storage, processing, or disposal is proposed within the drainage easement, electrical easement, or the 100-year floodplain.

2.4 OTHER PERMITS/AUTHORIZATIONS

Table 2-2 lists existing permits or construction approvals at the time of this Application development that are related to the Landfill.

Table 2-2 Permits and Construction Approvals

PERMIT PROGRAM	LANDFILL APPLICABILITY
Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	TCEQ Solid Waste Registration No.: CCR107 EPA ID No.:TXR000079082
Underground Injection Control Program under the Texas Injection Well Act	N.A.
National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	Texas Permit No.: WQ0004755000 EPA ID No.: TX0127256
Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA). Nonattainment Program under the FCAA	TCEQ Permit No. 70861
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA	TCEQ Permit No. 70861

Notes:

1. N.A.: not applicable

2.5 LEGAL AUTHORITY

Verification of legal status for the two entities having over 20 percent ownership in the Landfill (Brazos Sandy Creek Electric Cooperative, Inc. and Sandy Creek Energy Associates, L.P) and property affidavit are provided in Appendix I.C – Legal Authority.

2.6 GENERAL MAPS (30 TAC §352.231(E))

In accordance with 30 TAC §352.231(e), general layout drawings are provided in Appendix I.B, including the following:

- Site Location Map,
- General Topographic and Surrounding Features Map,
- Aerial Photograph,
- Facility Layout Map, and
- Land Ownership Map.

APPENDIX I.A
APPLICATION FORMS



Texas Commission on Environmental Quality

Registration Application for Coal Combustion Residuals (CCR) Waste Management

I. General Information

1. Reason for Submittal

Type of Registration Application

- ☒ New ☐ Major Amendment ☐ Minor Amendment
☐ Notice of Deficiency (NOD) Response ☐ Transfer ☐ Name Change
☐ Other

2. Application Fees

☒ \$150 Application Fee

Payment Method

☐ Check ☒ Online through ePay portal <www3.tceq.texas.gov/epay/>

If paid online, enter ePay Trace Number: 582EA000458289

3. Facility Information

Facility information must match regulated entity information on the Core Data Form.

Applicant: ☐ Owner ☐ Operator ☒ Owner/Operator

Facility TCEQ Solid Waste Registration No: CCR107

Facility EPA ID: TXR000079082

Regulated Entity Reference No. (if issued): RN 105905657

Facility Name: Sandy Creek Energy Station Coal Combustion Residual Waste Management Facility

Facility (Area Code) Telephone Number: (254) 896-4317

Facility physical street address (city, state, zip code, county): 2157 Rattlesnake Road

Facility mailing address (city, state, zip code, county): Riesel, Texas, 76682, McLennan

Latitude (Degrees, Minutes Seconds): 31° 28' 27"

Longitude (Degrees, Minutes Seconds): -96° 57' 18"

Tables

Tables	Submitted	Not Applicable
Table I.6. - CCR Waste Management Units	☒	☐
Table I.6.A. - Waste Management Information	☒	☐
Table I.6.B. - Wastes Managed in Registered Units	☒	☐
Table I.6.C. - Sampling and Analytical Methods	☒	☐
Table IV.A. - Landfill Characteristics	☒	☐
Table IV.B. - Landfill Liner System	☒	☐
Table IV.C. - Landfill Leachate Collection System	☒	☐
Table IV.D. - Inspection Schedule of Landfills	☒	☐
Table V.A. - Surface Impoundments Characteristics	☐	☒
Table V.B. - Surface Impoundment Liner System	☐	☒
Table V.J. - Inspection of Surface Impoundments	☐	☒
Table VI.A. - Unit Groundwater Detection Monitoring System	☒	☐
Table VI.C. - CCR Units Under Detection Monitoring	☒	☐
Table VI.D. - CCR Units Under Assessment Monitoring	☐	☒
Table VI.D-2. - Groundwater Detection Monitoring Parameters	☒	☐
Table VII.A.1. - Unit Closure	☐	☒
Table VII.A.2. - CCR Units Under Alternative Closure Notification	☐	☒
Table VIII.A.1. - Post-Closure Cost Summary for Existing Registered Units	☒	☐
Table VIII.A.2. - Post-Closure Cost Summary for Proposed Registered Units	☒	☐
Table VIII.B. - Post-Closure Period	☐	☒
Engineering Certification(s) - Dike Construction	☐	☒

Additional Attachments as Applicable - Select all those apply and add as necessary

- ☒ TCEQ Core Data Form(s)
- ☐ Signatory Authority Delegation
- ☒ Fee Payment Receipt
- ☐ Confidential Documents
- ☐ Certificate of Fact (Certificate of Incorporation)
- ☐ Assumed Name Certificate

Table I.6. – CCR Waste Management Units

CCR Unit No. ¹	Unit Name	N.O.R. No. ¹	Unit Description ³	Capacity	Unit Status ²
002	Sandy Creek Energy Station CCR Waste Management Facility	CCR107	CCR Landfill	3,870,000 CY	Active

1 Registered Unit No. and N.O.R. No. cannot be reassigned to new units or used more than once.

2 Unit Status options: Active, Closed, Inactive (built but not managing waste), Proposed (not yet built), Never Built, Transferred, Post-Closure.

3 If a unit has been transferred, the applicant should indicate which facility/permit it has been transferred to in the Unit Description column.

Table I.6.A. – Waste Management Information

Waste No. ¹	Waste Type(s)	Source	Expected Maximum Annual Waste Acceptance Rate (tons/year)
1	Fly ash	Generated during the coal combustion process at the Plant and collected in the SDA and Fabric Filter	284,000
2	Bottom ash	Generated during the coal combustion process at the Plant	48,000
3	Filter cake from the water treatment building	Generated from the filtering water at the treatment building	500
4	Spent SCR catalyst	Generated from the select catalytic reduction (SCR) system used at the Plant to reduce nitrogen oxide emissions	400
5	Class 2 spent demineralizer resin	Generated from the Plant's process water treatment system	15
6	Cooling tower sediments and cooling water screenings	Generated from the condenser and cooling tower as a result of the heat developed during the process of boiling water at the Plant	1
7	Spent resin	Generated from the Plant's process water treatment system	15

¹ Assign waste number sequentially. Do not remove waste number wastes which are no longer generated.

Table I.6.C – Sampling and Analytical Methods

Waste No. ¹	Sampling Location	Sampling Method	Frequency	Parameter	Test Method	Desired Accuracy Level
1	Fly Ash Silo (at Plant)	See Note 2	See Notes 2 & 3	See Note 4	See Note 4	See Note 4
2	Bottom ash storage (at Plant)					
3	Process Water Treatment System (at Plant)					
4	Selective Catalytic Reduction (at Plant)					
5	Process Water Treatment System (at Plant)					
6	Condenser and Cooling Tower (at Plant)					
7	Process Water Treatment System (at Plant)					

1 from Table I.6.A., first column

2 Waste classification and sampling methods are based on Toxic Characteristic Leaching Procedure (TCLP) and/or Process knowledge.

3 The Owner/Operator will obtain waste classification prior to disposal of waste within the landfill and after a process change that results in the generation of waste that changes the waste classification.

4 Parameters, test methods, and desired accuracy levels will be in accordance with TCEQ's Guidelines for the Classification and Coding of Industrial and Hazardous Waste.

Table IV.A. – Landfills Characteristics

Registered Unit No.	Landfill	N.O.R. No.	Waste Nos. ¹	Rated Capacity	Dimensions ²	Distance from lowest liner to groundwater	Action Leakage Rate (if required)	Unit will manage CCR Waste and non-CCR Waste (state all that apply)
002	Sandy Creek Energy Station CCR Waste Management Facility	CCR107	1 - 8	3,870,000 CY	Approx. 1,200 ft E-W, 1,500 ft N-S 138 ft Depth 40.7 acres - area	Greater than 1.52 meters (five feet), see note 3	N/A	CCR and non-CCR Waste (see Table I.6.B)

1 From Table I.6.A., first column

2 Dimensions should be provided as average length, width and depth, also include the surface acreage for the unit.

3 The shallowest geologic formation beneath the Landfill Registration Boundary that is capable of providing usable quantities of water is the Trinity Aquifer, located approximately 1,000 feet below the Landfill.

Table IV.B. – Landfill Liner System

Registered Unit No.*	Landfill	Geomembrane Liner Material	Geomembrane Liner Permeability (cm/sec)	Geomembrane Liner Thickness	Soil Liner Material	Soil Liner Permeability (cm/sec)	Soil Liner Thickness
002 – Cell 1	Sandy Creek Energy Station CCR Waste Management Facility	N/A	N/A	N/A	Compacted Clay	$k \geq 1 \times 10^{-7}$	3 - feet
002 – Cell 2		N/A	N/A	N/A	Compacted Clay	$k \geq 1 \times 10^{-7}$	3 - feet
002 – Cell 3		HDPE – Textured both sides	4×10^{-13}	60-mil	Compacted Clay	$k \geq 1 \times 10^{-7}$	2 - feet

* This number should match the Registration Unit No. given on Table IV.A.

Table IV.C. – Landfill Leachate Collection System

Registered Unit No.	Landfill Name	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material
002 – Cell 1	Sandy Creek Energy Station CCR Waste Management Facility	Leachate collection Trench - Drainage aggregate wrapped in 6.5 oz./sy geotextile	4"Ø HDPE SDR 17 leachate collection pipe	6.5 oz./sy geotextile wrapped around drainage aggregate in leachate collection trenches	N/A	N/A – gravity drain to leachate evaporation pond
002 – Cell 2		Floor/Sidewall – 200- mil geocomposite (double-sided) Leachate collection trench – drainage aggregate wrapped in 8 oz./sy geotextile	6"Ø HDPE SDR 11 leachate collection pipe and 24" Ø HDPE SDR 11 sump riser pipe	8 oz./sy geotextile wrapped around drainage aggregate and leachate collection pipe in leachate collection trenches and leachate sump	N/A	Drainage aggregate wrapped in 8 oz./sy geotextile
002 – Cell 3		Floor/Sidewall – 270-mil geocomposite (double-sided) Leachate collection trench – drainage aggregate wrapped in 12 oz./sy geotextile	6"Ø HDPE SDR 9 leachate collection pipe and 18" Ø HDPE SDR 11 sump riser pipe	12 oz./sy geotextile wrapped around drainage aggregate and leachate collection pipe in leachate collection trenches and leachate sump	N/A	Drainage aggregate wrapped in 12 oz./sy geotextile

Table IV.D. – Inspection Schedule of Landfills

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Unit 002 - Waste Spilled in route to landfill	Waste spilled in route to landfill.	Daily
Unit 002 - Landfill Structure and Slope	Sloughing, slumping, sliding, surface cracking, sinkholes, excessively steep slope, toe of slope movement, and vehicle damage.	Weekly
Unit 002 - Landfill Access Roads	Damage from vehicle traffic and erosion.	Monthly
Unit 002 - Intermediate Cover	Improper placement, thickness, erosion, vegetation, animal burrows, and for presence of waste or other contamination.	Weekly
Unit 002 - Final Cover	Improper placement, thickness, erosion, vegetation, animal burrows, and for presence of waste or other contamination.	Monthly
Unit 002 - Dust Emissions	Fugitive dust at the landfill and from haul trucks	Daily
Unit 002 - Erosion Control	Erosion of intermediate and final cover	Weekly (Interim), Monthly (Final)
Unit 002 - Ponding Water	Ponding water on landfill cover.	Weekly
Unit 002 - Run-on and Run-off Control Systems (Uncontaminated and Contact Water)	Damage to diversion berms, downchutes, perimeter drainage channels, culverts, detention basin(s) for damage.	Weekly
Unit 002 - Leachate Collection and Removal System	Damage to leachate riser pipes, sump pump/controls, and evaporation pond for damage and height of freeboard in the pond.	Weekly
	Damage to isolation valves, protective cover, exposed geosynthetics, and leachate evaporation pond underdrain system for damage or blockage.	Monthly
Unit 002 - Groundwater Monitoring System	Damage, excess vegetation, and other deficiencies to the groundwater monitoring wells..	Monthly

Table V.A. – Surface Impoundment Characteristics

Registered Unit No.	Surface Impoundment Name	N.O.R. No.	Waste Nos. ¹	Rated Capacity	Dimensions ²	Distance from lowest liner to groundwater	Action Leakage Rate (if required)	Unit will manage CCR Waste and non-CCR Waste (state all that apply)
N/A								

1 From Table I.6.A., first column

2 Dimensions should be provided as average length, width and depth, also include the surface acreage for the unit.

Table V.B. – Surface Impoundment Liner System

Registered Unit No.*	Surface Impoundment Name	Geomembrane Liner Material	Geomembrane Liner Permeability (cm/sec)	Geomembrane Liner Thickness	Soil Liner Material	Soil Liner Permeability (cm/sec)	Soil Liner Thickness
N/A							

* This number should match the Registration Unit No. given on Table V.A.

Table V.J. - Inspection Schedule of Surface Impoundments

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
N/A		

Table VI.A. – Unit Groundwater Detection Monitoring Systems

Waste Management Unit/Area Name ¹	Sandy Creek Energy Station CCR Waste Management Facility					
Well Number(s):	BW-1	MW-1	MW-2	MW-3	MW-4	MW-5
Hydrogeologic Unit Monitored	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations	Ozan & Wolfe City formations
Type (e.g., point of compliance, background, observation, etc.)	Background)	Point of compliance	Point of compliance	Point of compliance	Point of compliance	Point of compliance
Up or Down Gradient	Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Casing Diameter and Material	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC
Screen Diameter and Material	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC	2" Sch. 40 PVC
Screen Slot Size (in.)	0.010	0.010	0.010	0.010	0.010	0.010
Top of Casing Elevation (Ft, Mean Sea Level [MSL])	485.57	465.87	442.15	430.06	436.91	454.52
Grade or Surface Elevation (Ft, MSL)	482.70	462.85	439.18	427.09	433.73	451.70
Well Depth (Ft, Below Grade Surface [BGS])	38.63	34.23	19.63	16.23	30	35
Well Depth (Ft, Below Top of Casing [BTOC])	41.5	37.25	22.6	19.2	33.66	38.29
Screen Interval From (Ft, BGS) To (Ft, BGS)	From 28.30 To 38.30	From 23.89 To 33.89	From 9.3 To 19.3	From 5.9 To 15.9	From 20 To 30	From 25 To 35
Screen Interval From (Ft, BTOC) To (Ft, BTOC)	From 31.17 To 41.17	From 26.91 To 36.91	From 12.27 To 22.27	From 8.87 To 18.87	From 23.66 To 33.66	From 28.29 To 38.29

¹ From Tables in Section I.; MSL: Mean Sea Level; BGS: Below Grade Surface; BTOC: Below Top of Casing

Registration No.: CCR107
Registrant: Sandy Creek Energy Station

Table VI.C. – CCR Units Under Detection Monitoring

N.O.R. Unit No.	Unit Description ^{1,2}	Well(s)	Constituent(s)	Date of SSI Determination	Date of Assessment Monitoring Notification ³
CCR107	CCR Landfill	BW-1, MW-1, MW-2, MW-3	Appendix III	NA	NA

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year.

Table VI.D. – CCR Units Under Assessment Monitoring

N.O.R. Unit No.	Unit Description ^{1,2}	Well(s)	Constituent(s)	Date of SSI Determination	Date of Assessment Monitoring Notification ³
N/A					

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year

Table VI.D-2. – Groundwater Detection Monitoring Parameters

Parameter	Sampling Frequency	Analytical Method	Practical Quantification Limit (units)	Concentration Limit ¹
Boron	Semiannual	6010B	0.200	See Note 2
Calcium	Semiannual	6010B	5.00	See Note 2
Chloride	Semiannual	9056	25.0	See Note 2
Fluoride	Semiannual	9056	0.500	4.0
pH	Semiannual	9040C	0.100	See Note 2
Sulfate	Semiannual	9056	25.0	See Note 2
Total Dissolved Solids	Semiannual	160.1	10.0	See Note 2

1 The concentration limit is the basis for determining whether a release has occurred from the CCR unit/area.

2 MCL does not exist

Table VII.A.1. - Unit Closure

For each unit to be registered, list the unit components to be decontaminated, the possible methods of decontamination, and the possible methods of disposal of wastes and waste residues generated during unit closure.

Equipment or CCR Unit	Possible Methods of Decontamination ¹	Possible Methods of Disposal ¹
CCR Unit 002	Waste left in-place and installation of final cover	N/A
Landfill equipment	Wash off excessive waste material from equipment within landfill (active face)	N/A

¹ Applicants may list more than one appropriate method.

Table VII.A.2. – CCR Units Under Alternative Closure Notification

Registered Unit No.	N.O.R. Unit No.	Unit Description ^{1,2}	Date of Receipt of Last Waste ³	Date of Closure Notification ³
N/A				

1 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been requested pursuant to 40 CFR §257.103.

2 Indicates a unit for which a 30 TAC Chapter 352/40 CFR Part 257, Subpart D alternative closure determination has been made pursuant to 40 CFR §257.103.

3 Enter month, day, and year.

Table VIII.A.1. – Post-Closure Cost Summary for Existing Registered Units

Unit	Cost
1.0 Engineering:	
1.1 Site Inspection: Security (signs and fencing, benchmarks, final cover)	\$2,986
1.2 Correctional Plans and Specifications (engineering plans to correct erosion issues every other year)	\$8,500
2.0 Site Monitoring:	
2.1 Groundwater Sampling and Analysis (6 wells x 2 sampling events/yr)	\$18,000
2.2 Groundwater Well Plugging and Abandonment	\$200
3.0 Construction and Maintenance:	
3.1 Cap and Sideslope Repairs and Revegetation	\$1,700
3.2 Mowing and Vegetation Management	\$3,400
3.3 Groundwater Monitoring system Maintenance	\$2,500
3.4 Perimeter Fence and Gates Maintenance	\$1,500
3.5 Access Roads Maintenance	\$4,500
3.6 Drainage System Cleanout/Repairs	\$3,500
4.0 Leachate Management:	
4.1 Leachate Management System Operation and Maintenance	\$5,000
4.2 Decommissioning of Existing leachate Evaporation Pond	\$2,333
4.3 Contaminated leachate disposal-profiling, transportation and disposal (all leachate discharged into evaporation pond)	N/A
5.0 Administration:	
5.1 Annual Report Preparation and Submittal to TCEQ	\$4,500
Subtotal	\$58,619
10% Contingency	\$5,862
Third Party Administration and Project Management (2.5% of Subtotal)	\$1,465
Estimated Annual PCC Cost Total	\$ 65,946 (2021 dollars)
30 Year Post-Closure Costs	\$ 1,978,380 (2021 dollars)

Table VIII.A.2. - Post-Closure Cost Summary for Proposed Registered Units

Unit	Cost
1.0 Engineering:	
1.1 Site Inspection: Security (signs and fencing, benchmarks, final cover)	N/A
1.2 Correctional Plans and Specifications (engineering plans to correct erosion issues every other year)	\$1,675
2.0 Site Monitoring:	
2.1 Groundwater Sampling and Analysis (6 wells x 2 sampling events/yr)	N/A
2.2 Groundwater Well Plugging and Abandonment	N/A
3.0 Construction and Maintenance:	
3.1 Cap and Sideslope Repairs and Revegetation	\$340
3.2 Mowing and Vegetation Management	\$670
3.3 Groundwater Monitoring system Maintenance	N/A
3.4 Perimeter Fence and Gates Maintenance	N/A
3.5 Access Roads Maintenance	N/A
3.6 Drainage System Cleanout/Repairs	N/A
4.0 Leachate Management:	
4.1 Leachate Management System Operation and Maintenance	N/A
4.2 Decommissioning of Existing leachate Evaporation Pond	N/A
4.3 Contaminated leachate disposal-profiling, transportation and disposal (all leachate discharged into evaporation pond)	N/A
5.0 Administration:	
5.1 Annual Report Preparation and Submittal to TCEQ	N/A
Subtotal	\$2,685
10% Contingency	\$269
Third Party Administration and Project Management (2.5% of Subtotal)	\$67
Estimated Annual PCC Cost Total	\$ 3,021 (2021 dollars)
30 Year Post-Closure Costs	\$ 90,630 (2021 dollars)

Registration No.: CCR107
Registrant: Creek Energy Station

- 1 As units are added or deleted from these tables through future registration amendments, the remaining itemized unit costs should be updated for inflation when re-calculating the revised total cost in current dollars.

Table VIII.B. – Post-Closure Period

Unit Name	Date Certified Closed	Authorized Post-Closure Period (Yrs.)	Earliest Date Post-Closure Ends (See Note 1)
Sandy Creek Energy Station CCR Waste Management Facility	N/A	30 years	N/A

Note 1 – Post-Closure Care shall continue beyond the specified date until the Executive Director has approved the applicant's request to reduce or terminate the post-closure period, consistent with 30 TAC §352.1241 – Post-Closure Care Requirements.

Registration No.: CCR107
Registrant: Creek Energy Station

Surface Impoundments: Dike Construction – Not Applicable

For each surface impoundment dike, complete the following information:

"I, _____(licensed Professional Engineer), Texas P.E. License Number _____, of
Registered Firm _____(Name), Registered Firm No. _____ (Registration Number),
certify under penalty of law that I have personally examined and am familiar with the design
and construction of the dikes that are a portion of _____ (surface impoundment unit name).

I further certify that I have evaluated the dike design and materials of construction
using accepted engineering procedures, and have determined that the dike, including the
portion of the dike providing freeboard, has structural integrity, and is constructed in
accordance with applicable surface impoundment criteria per the following:

_____ Existing Diked Surface Impoundment – [40 CFR 257.73\(a\)\(1\) through \(4\)](#) and [30 TAC Section 352.731](#).

_____ New or Lateral Diked Surface Impoundment – [40 CFR 257.74\(a\)\(1\) through \(4\)](#) and [30 TAC Section 352.741](#).

Date: _____"

"(Signature)"

"(Seal)"



TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.) ☐ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.) ☐ Renewal (Core Data Form should be submitted with the renewal form) ☒ Other		
2. Customer Reference Number (if issued) CN 604335455	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued) RN 105905657

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
Sandy Creek Services, LLC			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits) 26-0784221	10. DUNS Number (if applicable) 969733570
11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:			
12. Number of Employees ☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher		13. Independently Owned and Operated? ☐ Yes ☒ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following ☐ Owner ☐ Operator ☐ Owner & Operator ☐ Occupational Licensee ☒ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:			
15. Mailing Address: PO Box 370 City: Riesel State: TX ZIP: 76682 ZIP + 4: 0370			
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
18. Telephone Number (254) 896-4200	19. Extension or Code	20. Fax Number (if applicable) () -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application) ☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.) Sandy Creek Energy Station

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	2161 Rattlesnake Road							
	City	Riesel	State	TX	ZIP	76682	ZIP + 4	
24. County	McLennan							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Traveling south on Highway 6, turn right onto FM1860. Take the second right onto Rattlesnake Road.								
26. Nearest City	Riesel				State	TX	Nearest ZIP Code		76682
27. Latitude (N) In Decimal:				28. Longitude (W) In Decimal:					
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds				
31	28	27	-96	57	18				
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)				
4911			221112						
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>									
Generation of electricity									
34. Mailing Address:	PO Box 370								
	City	Riesel	State	TX	ZIP	76682	ZIP + 4	370	
35. E-Mail Address:									
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)			
(254) 896-4200						() -			

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
				88448, CCR107
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Darryl Sparks	41. Title:	Compliance Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(254) 896-4317		() -	darryl.sparks@sandycreekpower.net

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Sandy Creek Services, LLC	Job Title:	Project Director
Name (In Print):	Bryon Kohls	Phone:	(254) 896- 4216
Signature:		Date:	5/6/22

APPENDIX I.C
LEGAL AUTHORITY

**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART II
LOCATION RESTRICTION DEMONSTRATION**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682



Prepared by:

SCS ENGINEERS
Texas Board of Professional Engineers, Reg. No. F-3407
Dallas/Fort Worth Office
1901 Central Drive, Suite 550
Bedford, Texas 76021
817/571-2288

Revision 0 – January 2022
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SCS Project No. 16221059.00

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II.C	Protected Species Habitat Assessment



**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX II.B3
SETTLEMENT CALCULATIONS**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

Prepared by:

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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART III
FUGITIVE DUST CONTROL PLAN**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

Prepared by:

SCS ENGINEERS
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART IV
LANDFILL CRITERIA AND DESIGN DRAWINGS**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682



Prepared by:

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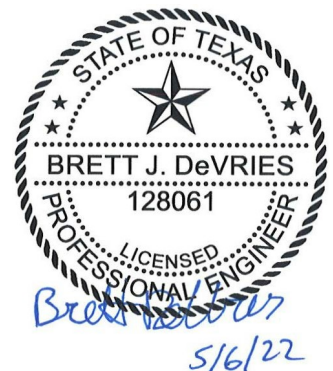
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX IV.A
LEACHATE COLLECTION AND REMOVAL SYSTEM PLAN**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682



Prepared by:

SCS ENGINEERS
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**ATTACHMENT IV.A1
LEACHATE GENERATION MODEL**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

Prepared by:

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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX IV.B
LINER CONSTRUCTION QUALITY ASSURANCE PLAN**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682



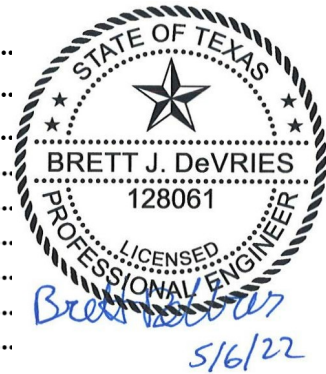
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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART IV, APPENDIX IV.C
RUN-ON AND RUN-OFF CONTROL SYSTEM PLAN**

Prepared for:

SANDY CREEK SERVICES, LLC
2161 Rattlesnake Road
Riesel, Texas 76682



Prepared by:

SCS ENGINEERS
Texas Board of Professional Engineers, Reg. No. F-3407
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Sandy Creek Energy Station
Coal Combustion Residual Waste
Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

Volume 2 of 2

Prepared for
Sandy Creek Services, LLC
2161 Rattlesnake Road
Riesel, Texas 76682

SCS ENGINEERS

SCS Project No. 162210590.00 | Revision 1 – May 2022

1901 Central Drive, Suite 550
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Sandy Creek Energy Station
Coal Combustion Residual Waste Management Facility
Registration Application
TCEQ Registration No. CCR107
McLennan County, Texas

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Volume 2 of 2

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Appendix VIII.B	Financial Assurance Mechanism

**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART V
SITE OPERATING PLAN**

Prepared for:

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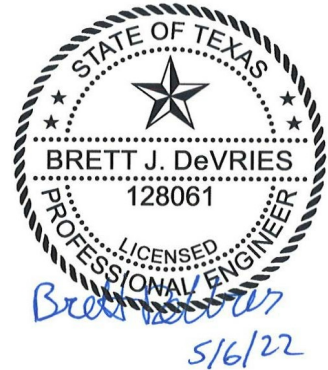


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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART VI
GROUNDWATER MONITORING AND
CORRECTIVE ACTION PLAN**

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**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
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McLENNAN COUNTY, TEXAS**

**APPENDIX VI.A
GROUNDWATER SAMPLING AND ANALYSIS PLAN**

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COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
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**PART VII
CLOSURE AND POST-CLOSURE CARE PLAN**

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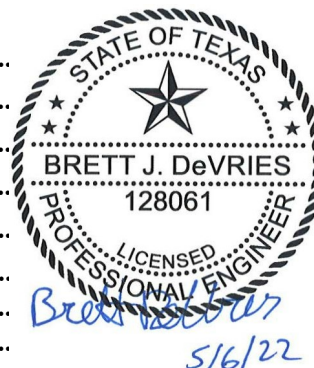
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**PART VIII
POST-CLOSURE CARE COST ESTIMATE AND FINANCIAL ASSURANCE**

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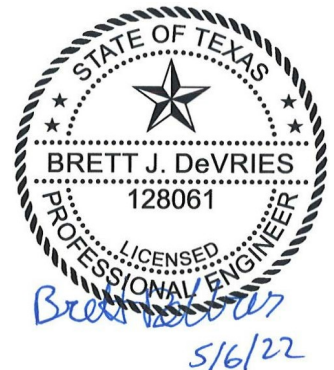
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ATTACHMENT D

LANDOWNER'S MAILING LIST

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