#### Sandy Creek Services, LLC

c/o Sandy Creek Energy Station 2161 Rattlesnake Rd. Riesel, TX 76682 (254) 896-4205 tel. (254) 896-7726 fax.

Via email

March 11, 2024

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

Re: Sandy Creek Services, LLC Sandy Creek Energy Station CCR Registration Number: CCR107 Regulated Entity Number: RN105905657 Customer Reference Number: CN602555526 Supplemental Information Submittal

Letter No.: SCES-TCEQ-0213

Dear Mr. Brown:

Sandy Creek Services, LLC (Owner and Operator) is providing this supplemental information submittal for the Sandy Creek Energy Station (Plant) CCR Waste Management Facility (Landfill) related to the clarification of waste accepted at the Landfill and updates to the TCEQ registration number that will be shown on the facility sign. As such, this supplemental information request includes the following:

- Related to clarification on waste accepted at the Landfill, including the spent fabric filter bags and cages and clarification for Spent SCR Catalyst, the following was <u>revised</u>:
  - Part I General Registration Application Requirements, Table 2-1;
  - Appendix I.A Application Forms, Tables I.6.A, I.6.B, and I.6.C;
  - o Appendix I.B Drawing I.B-5 Process Flow Diagram; and
  - Part V Site Operation Plan, Section 2.2.
- Part V Site Operation Plan, Section 2.1.1 was <u>revised</u> to update the TCEQ registration number shown on the facility sign.

Attached to this supplemental information submittal, we have included one unmarked copy 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 (March 2024) and revision number (Revision 1 or 3) on pages that have been revised as part of this

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supplemental information submittal. This supplemental information submittal has been posted on the publicly accessible internet website <u>http://www.sandycreekpower.net/registrationapplication</u>.

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

Bryon Kohls Project Director Sandy Creek Services, LLC

Attachments: as described herein

cc: Dana Perry – Sandy Creek Services, LLC Peter Guletsky, P.E. - Sandy Creek Services, LLC Luke Johnson - NAES Corporation Bobbie Perdue - NAES Corporation Ryan Kuntz, P.E. – SCS Engineers Brett DeVries, Ph.D., P.E. – SCS Engineers TCEQ Region 9 Office ATTACHMENT A

#### **REGISTRATION APPLICATION REVISIONS (MARKED)**

### 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

Dallas/Fort Worth Office 1901 Central Drive, Suite 550 Bedford, Texas 76021 817/571-2288

Revision 0 – January 2022 Revision 1 – May 2022 Revision 2 – October 2022 <u>Revision 3 – March 2024</u> SCS Project No. 16221059.00



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SCS ENGINEERS October <u>March</u> 202<del>2</del>4

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TEXAS WASTE CODE	WASTE TYPE	SOURCE	EXPECTED MAXIMUM ANNUAL WASTE ACCEPTANCE RATE (TONS/YEAR)	Conveyance Method	Disposition Location
00713032	Fly ash	Generated during the coal combustion process at the Plant and collected in the SDA and Fabric Filter	284,000	Hauling Equipment	Landfill or Offsite <sup>1</sup>
00703032	Bottom ash	Generated during the coal combustion process at the Plant	48,000	Hauling Equipment	Landfill <u>or</u> Offsite <sup>1</sup>
00093192	Filter cake from the water treatment building	Generated from the filtering water at the treatment building	500	Hauling Equipment	Landfill
00523932	Spent SCR catalyst <u>modules</u> (catalyst and housing)	Generated from the select <u>ive</u> catalytic reduction (SCR) system used at the Plant to reduce nitrogen oxide emissions	400	Hauling Equipment	Landfill
00564032	Class 2 spent demineralizer resin	Generated from the Plant's process water treatment system	15	Hauling Equipment	Landfill

TEXAS WASTE CODE	WASTE TYPE	SOURCE	EXPECTED MAXIMUM ANNUAL WASTE ACCEPTANCE RATE (TONS/YEAR)	Conveyance Method	Disposition Location
00731142	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	Hauling Equipment	Landfill
00574032	Spent resin	Generated from the Plant's process water treatment system	15	Hauling Equipment	Landfill
00783042	Spent fabric filter bags and cages	Generated from flue gas filtration in the Fabric Baghouse used at the Plant to reduce particulate matter emissions	<u>50</u>	<u>Hauling</u> Equipment	Landfill or Offsite <sup>2</sup>

### Table 2-1(Continued)

Notes:

1. Fly ash and bottom ash may be beneficially used as discussed in Part V Section 2.2.

2. Spent fabric filter bags and cages may be disposed offsite at an authorized disposal facility as discussed in Part V Section 2.2.

## 2.3 EXISTING CONDITIONS SUMMARY

The existing site conditions within the Landfill Registration Boundary are generally depicted on Drawing I.B-2 – General Topographic and Surrounding Features Map and Drawing I.V-1 – Existing Conditions Map. The Landfill and associated support facilities are located on the southwest corner of the Plant Property. The Plant/Landfill entrance is located approximately 0.7 miles north of the intersection of FM 1860 and Rattlesnake Road. Cells 1 and 2 are existing active cells with ongoing waste placement operations. A portion of Cell 3 (inclusive of Subcells 3A through 3D encompassing approximately 10.3 acres) was constructed in 2021 prior to and during the time of preparing this Application. The site is generally flat, sloping at approximately 1 to 5 percent towards the west, with the exceptions of stormwater features, soil stockpiles, and waste fill areas (i.e., Cells 1, 2, and a portion of 3).

Surface water within the Landfill Registration Boundary generally drains west to an existing channel where it flows to the southwestern Landfill Registration Boundary and flows west into an unnamed tributary that empties into Lake Creek Lake (an impoundment of Manos Creek). Manos

 Revision  $\Theta_3$  I-2-3

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 January March 2022-4

Creek provides flow into Brazos River. Surface water runoff (uncontaminated) from the Landfill is conveyed to the perimeter stormwater management system, comprised of perimeter channels and is directed to an existing stormwater pond south of the existing Landfill.

Other existing features at the time of preparing this Application within the Landfill Registration Boundary include: an equipment maintenance building; perimeter and internal roads utilized by the Plant/Landfill; leachate collection and removal system utilized by the Landfill, including leachate forcemain and leachate evaporation pond; groundwater underdrain system for Cell 2 and 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.

PERMIT PROGRAM	LANDFILL APPLICABILITY			
Hazardous Waste Management Program under the Texas	TCEQ Solid Waste Registration			
Solid Waste Disposal Act	No.: CCR107			
	EPA ID No.:TXR000079082			
Underground Injection Control Program under the Texas	N.A.			
Injection Well Act				
National Pollutant Discharge Elimination System	Texas Permit No.: WQ0004755000			
Program under the Clean Water Act and Waste Discharge				
Program under Texas Water Code, Chapter 26	EPA ID No.: TX0127256			
Prevention of Significant Deterioration Program under	TCEQ Permit No. 70861			
	TCLQ Fernine No. 70801			
the Federal Clean Air Act (FCAA).				
Nonattainment Program under the FCAA				
National Emission Standards for Hazardous Air	TCEQ Permit No. 70861			
Pollutants Preconstruction Approval under the FCAA				

Table 2-2	Permits and Construction Approvals	
-----------	------------------------------------	--

Notes:

1. N.A.: not applicable

## APPENDIX I.A

## APPLICATION FORMS





Waste No. <sup>1</sup>	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 <u>modules (catalyst and</u> <u>housing)</u>	Generated from the select <u>ive</u> 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
<u>8</u>	<u>Spent fabric filter</u> <u>bags and cages</u>	<u>Generated from flue</u> <u>gas filtration in the</u> <u>Fabric Filter</u> <u>Baghouse used at the</u> <u>Plant to reduce</u> <u>particulate matter</u> <u>emissions</u>	<u>50</u>

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

Waste No.1	Waste	TCEQ Waste Form Codes and Classification Codes
1	Fly ash	00713032
2	Bottom ash	00703032
3	Filter cake from the water treatment building	00093192
4	Spent SCR catalyst <u>modules</u> (catalyst and housing)	00523932
5	Class 2 spent demineralizer resin	00564032
6	Cooling tower sediments and cooling water screenings	00731142
7	Spent resin	00574032
<u>8</u>	Spent fabric filter bags and cages	00783042

#### Table I.6.B. – Wastes Managed in Registered Units

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

		Table I.6.C – Sampli	ng and Analytical M	lethods		
Waste No. <sup>1</sup>	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)					
<u>8</u>	Spent fabric Filter Baghouse (at Plant)					

#### Table I.6.C – Sampling and Analytical Methods

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.

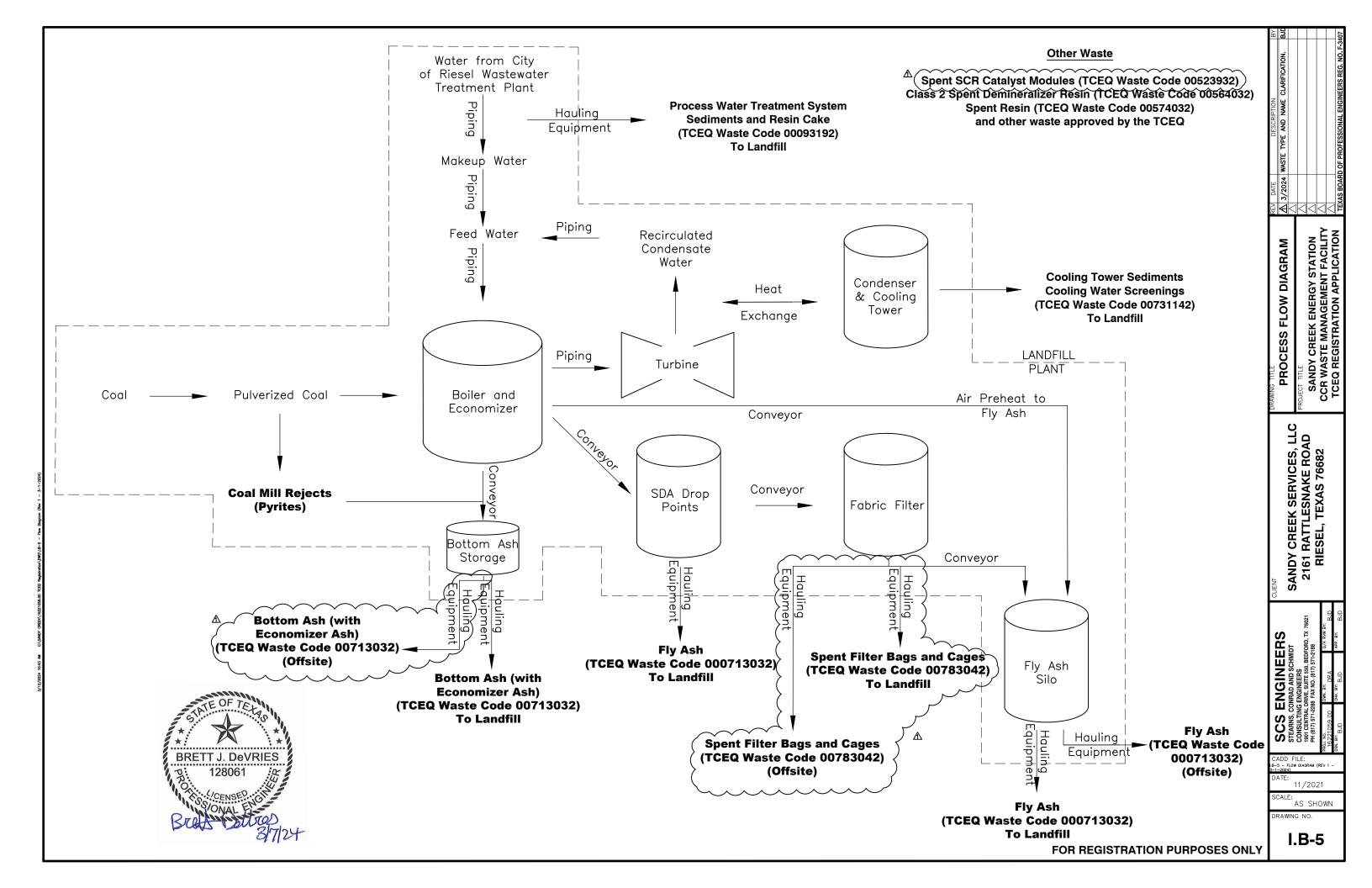
3 The Owner/Operator will obtain waste classification prior to disposal of waste within the landfill and after a process change that results in the generation of waste that changes the waste classification.

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.

### APPENDIX I.B

#### GENERAL LAYOUT DRAWINGS

- Drawing I.B-1 Site Location Map
- Drawing I.B-2 General Topographic and Surrounding Features Map
- Drawing I.B-3 Aerial Photograph
- Drawing I.B-4 Facility Layout Map
- Drawing I.B-5 Process Flow Diagram
- Drawing I.B-6 Land Ownership Map
- Property/Legal Description of Registration Boundary



### 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:** 

#### 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

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- 4.1 Recordkeeping Requirements

### **Appendices**

- V.A Weekly Inspection Checklist
- V.B Annual Inspection Checklist
- V.C 2020 Annual Inspection Report



# 2 OPERATIONAL PROCEDURES

## 2.1 ACCESS CONTROL

Security measures in place at the Landfill are designed to prevent unauthorized persons from entering the site, to protect the Landfill and its equipment from possible damage caused by trespassers, and to prevent disruption of Landfill operations caused any unauthorized site entry. The Plant is secured by a chain-link fence along the perimeter. The Landfill is accessed from Farm-to-Market [FM] 1860 via Rattlesnake Road, through a gated entrance located west of the Plant (Drawing I.B-4). Entrance through this gate is restricted at the guardhouse, where a gate attendant controls access and monitors vehicles entering and exiting the site during regular business hours. After business hours, entrance through this gate is controlled by Plant personnel. A gate, located south of Cell 2, normally remains locked but may be utilized to access the Landfill, as needed, by the Landfill Owner/Operator, visitors and/or contractors authorized for entry by the Landfill Owner/Operator. Other gates may be installed in the future, which will be accessible to authorized persons only.

### 2.1.1 Traffic Control and Access Roads

The Landfill is accessed via a road from the Plant to the Landfill perimeter road (Drawing I.B-4). The perimeter Landfill road is an all-weather road that is capable of supporting loads from vehicles accessing the Landfill. Temporary haul roads may be constructed as needed to access the Landfill and active working face. The perimeter road and temporary internal haul roads may be constructed of crushed stone, concrete rubble, masonry demolition debris, gravel, caliche, concrete paving, asphalt paving, or other suitable material and provide access from the Plant to the active Landfill area(s). Temporary internal access roads within the Landfill disposal areas (lined areas) may be constructed of CCR waste materials or other all-weather materials described above.

Roads used to transport waste materials from the Plant to the Landfill will be inspected for waste spilled en route to the Landfill on a daily basis with any spillage and removed if discovered prior to the end of the operation day. The access roads extending from the asphalt surface roads at the Plant to the Landfill area and the access roads (perimeter and internal haul roads) within the Landfill Registration Boundary are maintained by the Landfill Owner/Operator. The perimeter road and interior haul roads are maintained in an all-weather condition to drain freely and kept free of excessive ruts and potholes, as described in Section 3 of this SOP. Access road maintenance includes adding gravel (or other acceptable road construction material), grading, cleaning, and other actions required to provide continuous access during wet and dry weather conditions. The frequency of road regrading is on an as-needed basis, and is dependent on the inspections and if depressions, ruts, potholes, or soft spots of sufficient severity are detected.

Landfill Owner/Operator will maintain a sign adjacent to the Landfill near the intersection of the access road from the main power plant area to the Landfill and the Landfill perimeter road. The sign will be readable from the access road and at a minimum, will state the following:

#### "COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY TCEQ REGISTRATION NO. <u>88448CCR107</u> APPROVED WASTES ONLY"

## 2.2 WASTE STREAMS ACCEPTED

The primary wastes streams disposed in the Landfill are fly ash and bottom ash generated during the coal combustion process at the Plant. Other Class 2 and Class 3 nonhazardous industrial waste generated at the Plant will be disposed of at the Landfill. As of the writing of this SOP, the following wastes may be disposed of in the Landfill:

- Fly ash (Texas waste code: 00713032);
- Bottom ash (Texas waste code: 00703032);
- Filter cake from the water treatment building (Texas waste code: 00093192);
- Spent SCR catalyst modules (catalyst and housing, Texas waste code: 00523932);
- Class 2 spent demineralizer resin (Texas waste code: 00564032);
- Cooling tower sediments and cooling water screenings (Texas waste code: 00731142);
- Spent resin (Texas waste code: 00574032);
- Spent fabric filter bags and cages (Texas waste code: 00783042);
- Ancillary wastes, including coal mill rejects, waste coal, cooling tower sediments, cooling water screenings, sump pit sediments, nonhazardous sand-blast media, fire brick and refractory materials, sediments from the dredging of Plant's stormwater ditches and Plant's TPDES units, and construction debris, as described in a January 29, 2004 notification letter from the Owner to the TCEQ.

The general process diagram for waste generation at the Plant is shown on Part I, Appendix I.B, Drawing I.B-5 The Landfill Owner/Operator will obtain waste classification (including description, character, waste code, and analytical testing) prior to disposal of waste within the Landfill and following a process change that results in the generation of waste that changes the waste classification.

Under Toxic Substances Control Act (TSCA), fly ash and bottom ash generated at the Plant are considered chemical byproducts of the coal combustion process. Fly ash and bottom ash may be beneficially used for commercial purposes and are subject to the Chemical Data Reporting (CDR) requirements of TSCA (40 CFR §711). The fly ash and bottom ash are not subject to the CDR requirements if it is used by public or private organizations for enriching soil (40 CFR §720.30 (g)). As part of the Owner's TSCA report, the Landfill Owner/Operator tracks the beneficial reuse of fly ash and bottom ash generated at the site. Spent fabric filters bags and cages may be disposed of offsite to an authorized disposal facility. These records will be maintained in the Site Operating Record for the Landfill consistent with Section 4 of this SOP.

## 2.3 UNLOADING WASTES

Dump trucks (on or off-road), roll-off containers, or similar waste hauling equipment (referred herein as "Hauling Equipment") will be used to haul waste material from the Plant or other locations within the Plant property boundary to the Landfill for disposal. Dump trucks hauling ash

#### ATTACHMENT B

### **REGISTRATION APPLICATION REVISIONS (UNMARKED)**

### 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

Dallas/Fort Worth Office 1901 Central Drive, Suite 550 Bedford, Texas 76021 817/571-2288

Revision 0 – January 2022 Revision 1 – May 2022 Revision 2 – October 2022 Revision 3 – March 2024 SCS Project No. 16221059.00



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    - $\circ$  Drawing IV-2 Excavation Plan



- Drawing IV-3 Leachate Collection and Removal System Plan
- Drawing IV-4 Landfill Completion Plan
- Drawing IV-5 Landfill Cross-Section Location Plan
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- Drawing IV-8 Liner Details
- Drawing IV-9 Leachate Collection and Removal System Details
- Drawing IV-10 Final Cover Details
- Drawing IV-11 Perimeter Berm Details 1
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- Drawing IV-13 Liner/Final Cover Tie-in Details
- Appendix IV.A Leachate Collection and Removal System Plan
- Appendix IV.B Liner Construction Quality Assurance Plan
- Appendix IV.C Run-on and Run-off Control Plan

Part V – Site Operating Plan

- Appendix V.A Weekly Inspections Form
- Appendix V.B Annual Inspection Form
- Appendix V.C 2020 Annual Inspection Report

Part VI – Groundwater Monitoring and Correction Action Plan

- Appendix VI.A Groundwater Monitoring Sampling and Analysis Program
- Appendix VI.B Geology and Groundwater Supplemental Information
- Appendix VI.C Historical Groundwater Reports and Data

Part VII – Closure and Post-Closure Care Plan

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

- Appendix VIII.A Post-Closure Care Cost Estimates Calculations
- Appendix VIII.B Financial Assurance Mechanism



TEXAS WASTE CODE	WASTE TYPE	SOURCE	EXPECTED MAXIMUM ANNUAL WASTE ACCEPTANCE RATE (TONS/YEAR)	Conveyance Method	Disposition Location
00713032	Fly ash	Generated during the coal combustion process at the Plant and collected in the SDA and Fabric Filter	284,000	Hauling Equipment	Landfill or Offsite <sup>1</sup>
00703032	Bottom ash	Generated during the coal combustion process at the Plant	48,000	Hauling Equipment	Landfill or Offsite <sup>1</sup>
00093192	Filter cake from the water treatment building	Generated from the filtering water at the treatment building	500	Hauling Equipment	Landfill
00523932	Spent SCR catalyst modules (catalyst and housing)	Generated from the selective catalytic reduction (SCR) system used at the Plant to reduce nitrogen oxide emissions	400	Hauling Equipment	Landfill
00564032	Class 2 spent demineralizer resin	Generated from the Plant's process water treatment system	15	Hauling Equipment	Landfill

TEXAS WASTE CODE	WASTE TYPE	SOURCE	EXPECTED MAXIMUM ANNUAL WASTE ACCEPTANCE RATE (TONS/YEAR)	Conveyance Method	Disposition Location
00731142	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	Hauling Equipment	Landfill
00574032	Spent resin	Generated from the Plant's process water treatment system	15	Hauling Equipment	Landfill
00783042	Spent fabric filter bags and cages	Generated from flue gas filtration in the Fabric Baghouse used at the Plant to reduce particulate matter emissions	50	Hauling Equipment	Landfill or Offsite <sup>2</sup>

### Table 2-1(Continued)

Notes:

1. Fly ash and bottom ash may be beneficially used as discussed in Part V Section 2.2.

2. Spent fabric filter bags and cages may be disposed offsite at an authorized disposal facility as discussed in Part V Section 2.2.

## 2.3 EXISTING CONDITIONS SUMMARY

The existing site conditions within the Landfill Registration Boundary are generally depicted on Drawing I.B-2 – General Topographic and Surrounding Features Map and Drawing I.V-1 – Existing Conditions Map. The Landfill and associated support facilities are located on the southwest corner of the Plant Property. The Plant/Landfill entrance is located approximately 0.7 miles north of the intersection of FM 1860 and Rattlesnake Road. Cells 1 and 2 are existing active cells with ongoing waste placement operations. A portion of Cell 3 (inclusive of Subcells 3A through 3D encompassing approximately 10.3 acres) was constructed in 2021 prior to and during the time of preparing this Application. The site is generally flat, sloping at approximately 1 to 5 percent towards the west, with the exceptions of stormwater features, soil stockpiles, and waste fill areas (i.e., Cells 1, 2, and a portion of 3).

Surface water within the Landfill Registration Boundary generally drains west to an existing channel where it flows to the southwestern Landfill Registration Boundary and flows west into an unnamed tributary that empties into Lake Creek Lake (an impoundment of Manos Creek). Manos

Creek provides flow into Brazos River. Surface water runoff (uncontaminated) from the Landfill is conveyed to the perimeter stormwater management system, comprised of perimeter channels and is directed to an existing stormwater pond south of the existing Landfill.

Other existing features at the time of preparing this Application within the Landfill Registration Boundary include: an equipment maintenance building; perimeter and internal roads utilized by the Plant/Landfill; leachate collection and removal system utilized by the Landfill, including leachate forcemain and leachate evaporation pond; groundwater underdrain system for Cell 2 and 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.

	11
PERMIT PROGRAM	LANDFILL APPLICABILITY
Hazardous Waste Management Program under the Texas	TCEQ Solid Waste Registration
Solid Waste Disposal Act	No.: CCR107
	EPA ID No.:TXR000079082
Underground Injection Control Program under the Texas	N.A.
Injection Well Act	
National Pollutant Discharge Elimination System	Texas Permit No.: WQ0004755000
Program under the Clean Water Act and Waste Discharge	
Program under Texas Water Code, Chapter 26	EPA ID No.: TX0127256
	TOPO D
Prevention of Significant Deterioration Program under	TCEQ Permit No. 70861
the Federal Clean Air Act (FCAA).	
Nonattainment Program under the FCAA	
National Emission Standards for Hazardous Air	TCEQ Permit No. 70861
Pollutants Preconstruction Approval under the FCAA	

Notes:

1. N.A.: not applicable

## APPENDIX I.A

## APPLICATION FORMS





Waste No. <sup>1</sup>	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 modules (catalyst and housing)	Generated from the selective 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
8	Spent fabric filter bags and cages	Generated from flue gas filtration in the Fabric Filter Baghouse used at the Plant to reduce particulate matter emissions	50

Table I.6.A. – Waste Mar	nagement Information
--------------------------	----------------------

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

Waste No.1	Waste	TCEQ Waste Form Codes and Classification Codes
1	Fly ash	00713032
2	Bottom ash	00703032
3	Filter cake from the water treatment building	00093192
4	Spent SCR catalyst modules (catalyst and housing)	00523932
5	Class 2 spent demineralizer resin	00564032
6	Cooling tower sediments and cooling water screenings	00731142
7	Spent resin	00574032
8	Spent fabric filter bags and cages	00783042

### Table I.6.B. – Wastes Managed in Registered Units

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

		Table I.6.C – Sampli	ng and Analytical I	Methods		
Waste No. <sup>1</sup>	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)					
8	Spent fabric Filter Baghouse (at Plant)					

#### Table I.6.C – Sampling and Analytical Methods

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.

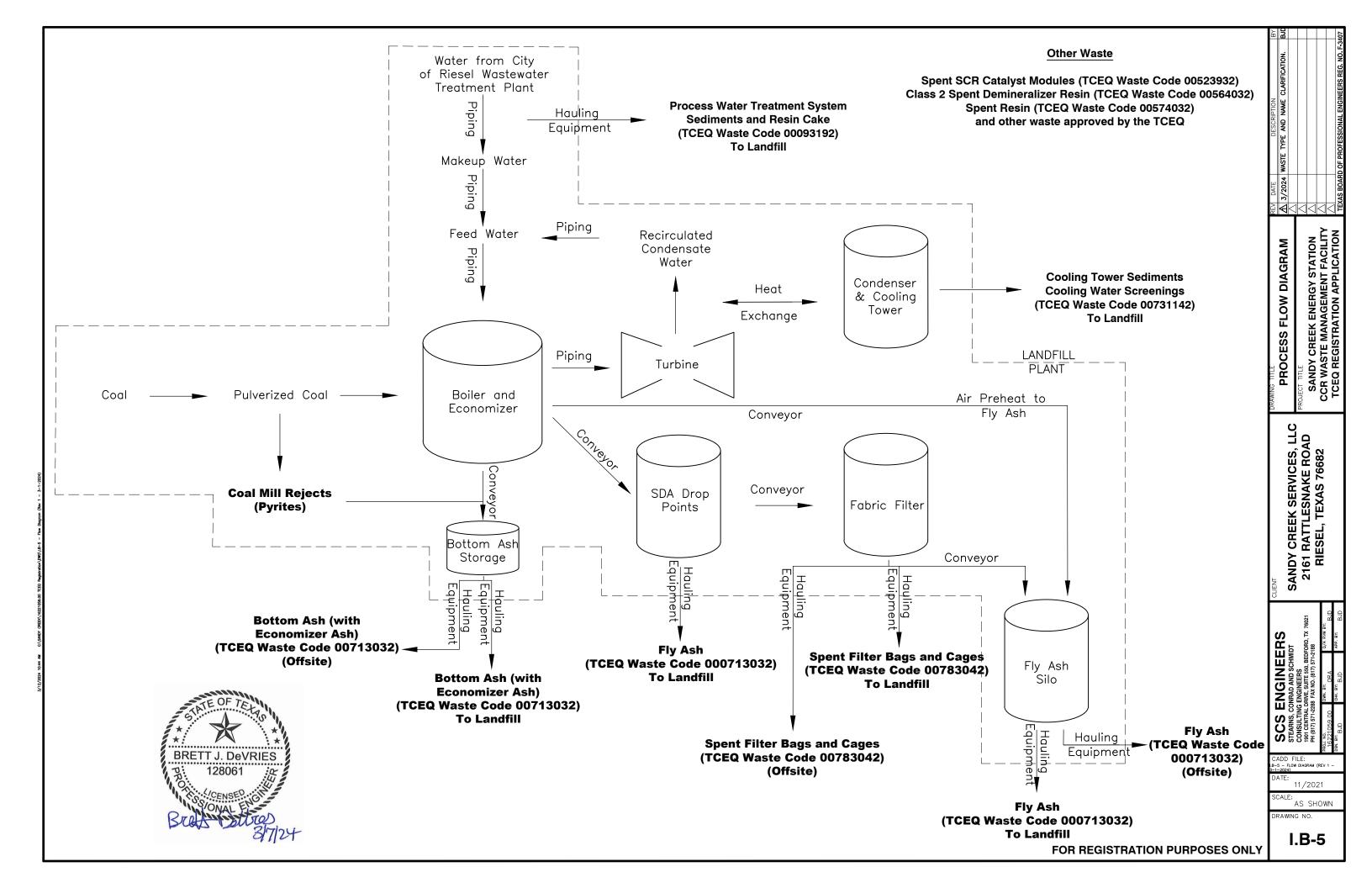
3 The Owner/Operator will obtain waste classification prior to disposal of waste within the landfill and after a process change that results in the generation of waste that changes the waste classification.

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.

### APPENDIX I.B

#### GENERAL LAYOUT DRAWINGS

- Drawing I.B-1 Site Location Map
- Drawing I.B-2 General Topographic and Surrounding Features Map
- Drawing I.B-3 Aerial Photograph
- Drawing I.B-4 Facility Layout Map
- Drawing I.B-5 Process Flow Diagram
- Drawing I.B-6 Land Ownership Map
- Property/Legal Description of Registration Boundary



### 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:**

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





28061

#### **SCS ENGINEERS**

**Prepared by:** 

# 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 Revision 1 – May 2022 Revision 2 – October 2022 Revision 3 – March 2024 SCS Project No. 16221059.00

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- 3.1 Site Inspection and Maintenance Schedule (Active Landfill Period)
- 4.1 Recordkeeping Requirements

### **Appendices**

- V.A Weekly Inspection Checklist
- V.B Annual Inspection Checklist
- V.C 2020 Annual Inspection Report



# 2 OPERATIONAL PROCEDURES

## 2.1 ACCESS CONTROL

Security measures in place at the Landfill are designed to prevent unauthorized persons from entering the site, to protect the Landfill and its equipment from possible damage caused by trespassers, and to prevent disruption of Landfill operations caused any unauthorized site entry. The Plant is secured by a chain-link fence along the perimeter. The Landfill is accessed from Farm-to-Market [FM] 1860 via Rattlesnake Road, through a gated entrance located west of the Plant (Drawing I.B-4). Entrance through this gate is restricted at the guardhouse, where a gate attendant controls access and monitors vehicles entering and exiting the site during regular business hours. After business hours, entrance through this gate is controlled by Plant personnel. A gate, located south of Cell 2, normally remains locked but may be utilized to access the Landfill, as needed, by the Landfill Owner/Operator, visitors and/or contractors authorized for entry by the Landfill Owner/Operator. Other gates may be installed in the future, which will be accessible to authorized persons only.

### 2.1.1 Traffic Control and Access Roads

The Landfill is accessed via a road from the Plant to the Landfill perimeter road (Drawing I.B-4). The perimeter Landfill road is an all-weather road that is capable of supporting loads from vehicles accessing the Landfill. Temporary haul roads may be constructed as needed to access the Landfill and active working face. The perimeter road and temporary internal haul roads may be constructed of crushed stone, concrete rubble, masonry demolition debris, gravel, caliche, concrete paving, asphalt paving, or other suitable material and provide access from the Plant to the active Landfill area(s). Temporary internal access roads within the Landfill disposal areas (lined areas) may be constructed of CCR waste materials or other all-weather materials described above.

Roads used to transport waste materials from the Plant to the Landfill will be inspected for waste spilled en route to the Landfill on a daily basis with any spillage and removed if discovered prior to the end of the operation day. The access roads extending from the asphalt surface roads at the Plant to the Landfill area and the access roads (perimeter and internal haul roads) within the Landfill Registration Boundary are maintained by the Landfill Owner/Operator. The perimeter road and interior haul roads are maintained in an all-weather condition to drain freely and kept free of excessive ruts and potholes, as described in Section 3 of this SOP. Access road maintenance includes adding gravel (or other acceptable road construction material), grading, cleaning, and other actions required to provide continuous access during wet and dry weather conditions. The frequency of road regrading is on an as-needed basis, and is dependent on the inspections and if depressions, ruts, potholes, or soft spots of sufficient severity are detected.

Landfill Owner/Operator will maintain a sign adjacent to the Landfill near the intersection of the access road from the main power plant area to the Landfill and the Landfill perimeter road. The sign will be readable from the access road and at a minimum, will state the following:

#### "COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY TCEQ REGISTRATION NO. CCR107 APPROVED WASTES ONLY"

## 2.2 WASTE STREAMS ACCEPTED

The primary wastes streams disposed in the Landfill are fly ash and bottom ash generated during the coal combustion process at the Plant. Other Class 2 and Class 3 nonhazardous industrial waste generated at the Plant will be disposed of at the Landfill. As of the writing of this SOP, the following wastes may be disposed of in the Landfill:

- Fly ash (Texas waste code: 00713032);
- Bottom ash (Texas waste code: 00703032);
- Filter cake from the water treatment building (Texas waste code: 00093192);
- Spent SCR catalyst modules (catalyst and housing, Texas waste code: 00523932);
- Class 2 spent demineralizer resin (Texas waste code: 00564032);
- Cooling tower sediments and cooling water screenings (Texas waste code: 00731142);
- Spent resin (Texas waste code: 00574032);
- Spent fabric filter bags and cages (Texas waste code: 00783042);
- Ancillary wastes, including coal mill rejects, waste coal, cooling tower sediments, cooling water screenings, sump pit sediments, nonhazardous sand-blast media, fire brick and refractory materials, sediments from the dredging of Plant's stormwater ditches and Plant's TPDES units, and construction debris, as described in a January 29, 2004 notification letter from the Owner to the TCEQ.

The general process diagram for waste generation at the Plant is shown on Part I, Appendix I.B, Drawing I.B-5 The Landfill Owner/Operator will obtain waste classification (including description, character, waste code, and analytical testing) prior to disposal of waste within the Landfill and following a process change that results in the generation of waste that changes the waste classification.

Under Toxic Substances Control Act (TSCA), fly ash and bottom ash generated at the Plant are considered chemical byproducts of the coal combustion process. Fly ash and bottom ash may be beneficially used for commercial purposes and are subject to the Chemical Data Reporting (CDR) requirements of TSCA (40 CFR §711). The fly ash and bottom ash are not subject to the CDR requirements if it is used by public or private organizations for enriching soil (40 CFR §720.30 (g)). As part of the Owner's TSCA report, the Landfill Owner/Operator tracks the beneficial reuse of fly ash and bottom ash generated at the site. Spent fabric filters bags and cages may be disposed of offsite to an authorized disposal facility. These records will be maintained in the Site Operating Record for the Landfill consistent with Section 4 of this SOP.

## 2.3 UNLOADING WASTES

Dump trucks (on or off-road), roll-off containers, or similar waste hauling equipment (referred herein as "Hauling Equipment") will be used to haul waste material from the Plant or other locations within the Plant property boundary to the Landfill for disposal. Dump trucks hauling ash