Texas Commission on Environmental Quality

Remediation Division Correspondence Identification Form

SITE & PROGRAM AREA IDENTIFICATION	
SITE LOCATION	**REMEDIATION DIVISION PROGRAM AND FACILITY IDENTIFICATION**
Site Name: **Copano Enterprises LLC, dba CE Ranch LLC, Copano Site (Beds 1-4), Aransas and San Patricio Counties, Texas**	Is This Site Being Managed Under A State Lead Contract? ☐ Yes ☑ No
Address 1: **7073 CR 93**	Program Area: **IHW CORRECTIVE ACTION**
Address 2:	Mail Code: **MC-127**
City: **Aransas Pass** State: **Texas**	Is This A New Site To This Program Area? ☐ Yes ☐ No
Zip Code: **78336** County: **Aransas**	
TCEQ Region: **Region 14 – Corpus Christi**	

DOCUMENT(S) IDENTIFICATION		
	PHASE OF REMEDIATION	**DOCUMENT NAME**
1.	**MISCELLANEOUS**	**SEMI-ANNUAL MATERIALS PLACEMENT REPORT**
2.		
3.		
4.		
5.		

CONTACT INFORMATION					
RESPONSIBLE PARTY INFORMATION					
Name:	**Rajat Ghosh**				
Company:	**Copano Enterprises LLC**	Phone Number:	**412-315-2738**	Fax Number:	
Address 1:	**201 Isabella St.**	City:	**Pittsburgh**	State: **PA**	Zip Code: **15212-5858**
Address 2:		Email Address:	**Rajat.Ghosh@alcoa.com**		
ENVIRONMENTAL CONSULTANT/REPORT PREPARER/AGENT					
Name:	**Matt Wickham**				
Company:	**WSP USA, Inc**	Phone Number:	**361-573-6442**	Fax Number:	**361-573-6449**
Address 1:	**1501 E Mockingbird, Ste. 420**	City:	**Victoria**	State: **TX**	Zip Code: **77904**
Address 2:		Email Address:	**Matthew.Wickham@wsp.com**		

TCEQ INTERNAL USE ONLY			
Document No.	TCEQ Database Term	Document No.	TCEQ Database Term
1.		4.	
2.		5.	
3.			

Copano Enterprises LLC
dba CE Ranch LLC
201 Isabella Street
Pittsburgh, PA 15212-5858 USA

January 10, 2025

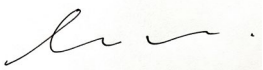
Mr. Aaron Correll
VCP-CA Section
Remediation Division
Texas Commission on Environmental Quality
P.O Box 13087
Austin, Texas 78711-3087

Re: Transmittal
Notice of Applied Materials – Semi-Annual Report No. 13
June 1, 2024 to November 30, 2024
TCEQ SWR No. 30097; EPA ID No. TXD008129983
Copano Site

Please find enclosed the above-referenced document prepared by WSP USA Inc. on behalf of Copano Enterprises LLC, dba as CE Ranch LLC, in accordance with Section 11 of our 9019 Settlement Agreement with TCEQ. The report will be posted on the Copano website.

Please contact me with any questions.

Sincerely,



Rajat S. Ghosh, Ph.D., PE
Director, Remediation and Technology

Enc.

cc: Tammy Mitchell, Special Counsel, TCEQ Office of Legal Services (Electronic copy on USB via Fed Ex)
Isaac Vela, TCEQ Office of Waste, Waste Permits Section (Electronic copy on USB via Fed Ex)
Susan Clewis, TCEQ (Electronic copy on USB via Fed Ex)
Timothy Perdue, TCEQ (Electronic copy on USB via Fed Ex)
Rajesh Acharya, TCEQ Enforcement Division (Electronic copy on USB via Fed Ex)
Matt Wickham, WSP

REPORT

Notice of Applied Materials - Semi-Annual Report No. 13

June 1, 2024 to November 30, 2024

Submitted to:

CE Ranch LLC

Submitted by:

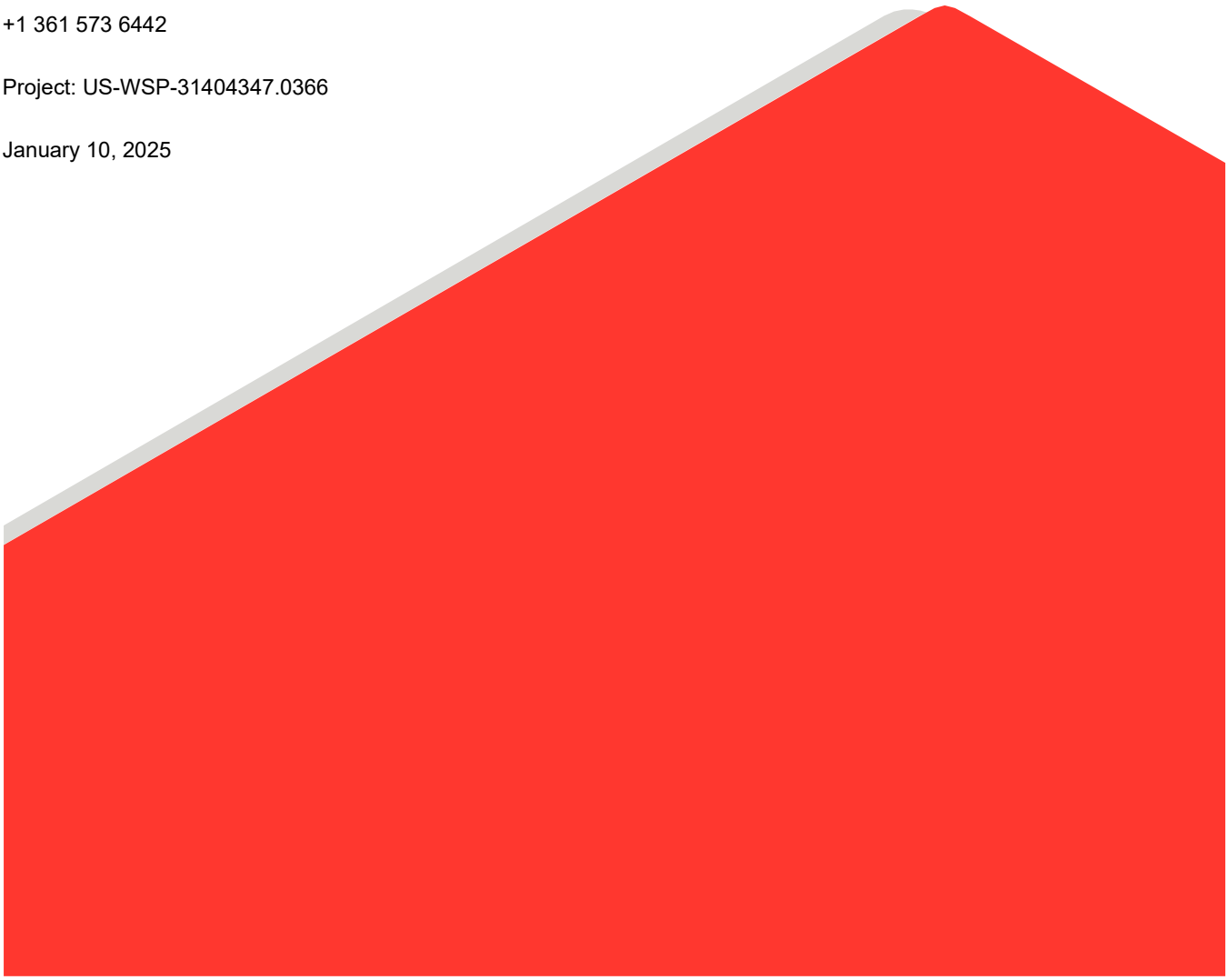
WSP USA Inc.

1501 E. Mockingbird, Ste. 420, Victoria, Texas, USA 77904

+1 361 573 6442

Project: US-WSP-31404347.0366

January 10, 2025



Distribution List

Rajesh Acharya - TCEQ Enforcement Division

Isaac Vela - TCEQ Office of Waste, Waste Permits Section

Susan Clewis - TCEQ Region 14

Aaron Correll – TCEQ Remediation Division

Tammy Mitchell – Special Counsel, TCEQ Office of Legal Services

Timothy Perdue - TCEQ Region 14

Rajat Ghosh – Copano Enterprises, LLC

Table of Contents

Signature Page

WSP USA Inc.

Matthew K. Wickham, P.G.
Vice President/Team Lead

Stephen E. Grahmann, P.E.
Lead Consultant, Environmental Engineer

1.0 INTRODUCTION

Copano Enterprises LLC (dba CE Ranch LLC) (CE) owns and operates the Copano Property (the Site), in San Patricio and Aransas Counties, Texas (Figure 1). CE and the Texas Commission on Environmental Quality (TCEQ) entered into a 9019 Settlement Agreement (the Agreement) on May 21, 2018, that outlines various environmental and other requirements. Section 11 of the Agreement requires semi-annual reporting for placement of various materials within the beds at the Site.

This Semi-Annual Report No. 13 has been prepared by WSP USA Inc. (WSP) and summarizes the materials applied at the Site from June 1, 2024, through November 30, 2024. Section 2 of this report contains a description of the placement activities, and Section 3 describes planned future activities. Aerial photos of Bed 1 taken during the reporting period are included in Appendix A.

2.0 CURRENT CONDITIONS AND MATERIALS PLACEMENT

The entire Copano Property consists of more than 11,000 acres and is bisected (into north and south portions) by State Highway 188. Beds 1, 2, 3 and 4 of the Site covers approximately 3,100 acres. From the time period of 1972 until 2016, bauxite residue was pumped to the Site via pipelines from the alumina refinery located approximately 10 miles to the south of the property.

2.1 Bed 1

Bed 1 is approximately 838 acres in surface area and is made up of three sections (Offset Area, Borrow Area, and Inner Area) that are separated from each other with internal levees (Figure 2). The Offset Area (174 ac.) is the mostly vegetated perimeter area that is irrigated on a periodic basis with effluent water purchased from the City of Aransas Pass (AP); this portion of Bed 1 includes an external levee and a subsurface leachate collection system. As occurred during the previous reporting periods, soil from on-site borrow areas continues to be placed within the Offset Area to improve the vegetative cover. Located in the northwest corner of the Offset Area is the Sump Area where combined surface flow from rain events and flushing accumulates prior to being pumped to Bed 2 or allowed to evaporate. The Borrow Area (137 ac.) is situated inside of the Offset Area and includes subsurface leachate and stormwater collection

systems. The surface of the Borrow Area underwent tillage activities during the reporting period in preparation for flushing with effluent water in the near future. The Inner Area (527 ac.) makes up the remaining portion of Bed 1 and contains stacked bauxite residue, the upper layer of which continues to be ripped, disked, and plowed prior to flushing with effluent water from AP. That tillage process also includes organic enrichment in the upper layer via placement of mulch and hay.

On February 4, 2021, CE submitted a notification to TCEQ of its intent to move forward with the application of synthetic gypsum, which promotes the replacement of available sodium ions with calcium (via cation exchange), further lowering hydroxide and carbonate alkalinity, and reduces soil pH to a level where the soil's nutrient and organic loading can be increased to sustain vegetative growth. The areas that were deemed suitable for application were based on field evaluation (pH and conductivity) as well as laboratory analysis of samples obtained from the upper residue surface. The gypsum application process began within the Inner Area of Bed 1 during April 2021 and continued with coverage across approximately 38 acres during this reporting period (Figure 2) for a total of approximately 482 acres covered to date. On February 18, 2022, CE submitted notification to TCEQ for the application of a carbon-based fertilizer and a custom seed blend to establish a vegetative cover and promote clean stormwater runoff. During this reporting period, a Fall blend of Winter Rye seed was applied to approximately 48 acres within the Inner Area (Figure 2). In April 2024, CE received an acknowledgement letter from the TCEQ for elemental sulfur to be used with a sulfur burner, SO_2 generator as a soil amendment to treat irrigation water, primarily to control pH and alkalinity.

The type, estimated amount, source, and locations for the materials placed during the reporting period are listed in Table 1; also included are the approximate totals since May 2018. Figure 2 shows the coverage and general placement areas for mulch, soil, gypsum, seed, and cotton gin residuals on Bed 1 for this reporting period. Aerial photographs that show the conditions of Bed 1 during the reporting period are included in Appendix A.

TABLE 1: PLACEMENT OF MATERIALS - BED 1

Material Description	Source of Material	Quantity During Reporting Period	Placement Location	Approx. Total Quantity Since May 2018
Hay	Off-site Suppliers and Copano Ranch	0 bales	N/A	16,198 bales
Mulch	Dawson and Others	1,200 cubic yards	See Figure 2	596,730 cubic yards
Grass Seed	Off-site Source	2,300 pounds	See Figure 2	141,520 pounds
Fertilizer	Off-site Source	0 pounds	Inner Area	211,425 pounds
Effluent Water	City of Aransas Pass	43,200,000 gallons	Flushing in the Inner Area	1,809,180,000 gallons
Sludge (River Mud)	San Patricio MWD	161,445 pounds	Inner Area	2,006,833 pounds
Mix of Stone, Sand, Gravel, Crusher Run Limestone and Binder	Off-site Sources	1,820 cubic yards	Inner Area	8,420 cubic yards
Cotton Gin Residuals	Gregory Gin 600 6th Street Gregory, TX 78359	0 cubic yards	N/A	124,800 cubic yards
	Edcot Gin 5019 CR 51 Odem, TX 78370	0 cubic yards	N/A	80,520 cubic yards
	Midway Gin 5455 CR 3567 Taft, TX 78390	7,500 cubic yards	See Figure 2	51,780 cubic yards
Synthetic Gypsum	Eco Material Technologies, Inc. (formerly Boral Resources) (Deely-Spruce Facility) 12940 South State Highway 181, San Antonio, TX	1,140 tons	See Figure 2	18,863 tons
Soil	On-site Sources	22,795 cubic yards	See Figure 2	229,337 cubic yards

Compost	Garden-Ville Victoria 18125 FM Road 1686 Victoria, TX 77905	0 cubic yards	N/A	19,951 cubic yards
	Kitchen Pride Mushroom Farms 1043 County Road 348 Gonzales, TX 78629	0 cubic yards	N/A	60 cubic yards
Elemental Sulfur	Harmon Systems International, LLC 2201 Coy Avenue, Bakersfield, CA 93307	4,500 pounds	Flushing in the Inner Area	4,500 pounds

The total volume of the effluent water and sludge (river mud) applied during the reporting period is based on the estimated application rate. The quantities of cotton gin residuals mulch, sand, synthetic gypsum, grass seed, soil, and elemental sulfur placed on Bed 1 are based on estimated amounts recorded in the daily field records.

2.2 Bed 2

Bed 2 is approximately 1,203 acres in surface area, contains bauxite residue and impounded water. It has been integral for site-wide water management including leachate, effluent water, stormwater, and surface water pumped from Bed 1. During this reporting period, effluent water from AP was pumped into Bed 2 instead of into the Irrigation Pond to keep the water level within the Irrigation Pond manageable because flushing on Bed 1 was not occurring.

Because wind and wave action can generate foam that accumulates along the downwind shorelines at the base of the interior levees, an anti-foaming agent (Unfoamer®) mixed with water (from an on-site well) continues to be sprayed along the Bed 2 shorelines on an as-needed basis. Table 2 lists the type, amount, source, and location for the materials placed within Bed 2 during the reporting period and since May 2018.

TABLE 2: PLACEMENT OF MATERIALS - BED 2

Material Description	Source of Material	Quantity During Reporting Period	Placement Location	Approx. Total Quantity Since May 2018
Effluent Water	City of Aransas Pass	24,000,000 gallons	Discharged in SW Corner	487,275,000 gallons
Sludge (River Mud)	San Patricio MWD	0 pounds	N/A	928,360 pounds
Leachate	Bed 1	22,763,520 gallons	Discharged in SW Corner	489,243,120 gallons
Surface Water	Bed 1	45,864,000 gallons	Discharged in SW Corner	1,713,070,000 gallons
Surface Water	Beds 3 & 4	0 gallons	N/A	853,170,000 gallons
Bay Water	Port Bay	0 gallons	N/A	457,830,125 gallons
Hay	Off-Site Supplier and Copano Ranch	0 bales	N/A	44 bales
Soil	On-site Sources	0 cubic yards	N/A	2,600 cubic yards
Concrete Rip Rap	Off-site Source	0 cubic yards	N/A	10,000 cubic yards

Groundwater (Foam Elimination)	On-site Well	24,000 gallons	Unfoamer and groundwater mixture sprayed on foam accumulated along Bed 2 Shorelines	2,813,000 gallons
Unfoamer (Anti-foaming Agent)	Off-site Supplier	1.0 gallons		128.58 gallons

Quantities are estimated based on the daily flow rates for effluent water, eachate, and surface water from Bed 1. The quantities of groundwater and Unfoamer used during the reporting period were estimated amounts recorded in the daily field records.

2.3 Bed 3

Bed 3 is approximately 415 acres in surface area and contains bauxite residue and impounded water. No materials were placed within Bed 3 during this reporting period.

Table 3 lists the type, estimated amount, source, and location for the materials placed during the reporting period and since May 2018.

TABLE 3: PLACEMENT OF MATERIALS - BED 3

Material Description	Source of Material	Quantity During Reporting Period	Placement Location	Approx. Total Quantity Since May 2018
Bay Water	Port Bay	0 gallons	N/A	145,278,796 gallons
Surface Water	Bed 4	0 gallons	N/A	393,480,000 gallons
Surface Water	Bed 2	0 gallons	N/A	39,600,000 gallons
Bauxite Residue	Bed 4	0 cubic yards	N/A	5,800 cubic yards
Hay	Copano Ranch	0 bales	N/A	942 bales
Scrap Steel Pipe	Bed 4	0 linear feet	N/A	1,100 linear feet
Groundwater (Foam Elimination)	On-site Well	0 gallons	N/A	276,000 gallons
Unfoamer (Anti-foaming Agent)	Off-site Supplier	0 gallons		11.50 gallons

2.4 Bed 4

Bed 4 is approximately 697 acres in surface area and contains impounded water and a minor amount of bauxite residue in the southwest corner. No materials were placed within Bed 4 during this reporting period.

Table 4 shows the type, amount, source, and location for the materials placed within Bed 4 since May 2018.

TABLE 4: PLACEMENT OF MATERIALS - BED 4

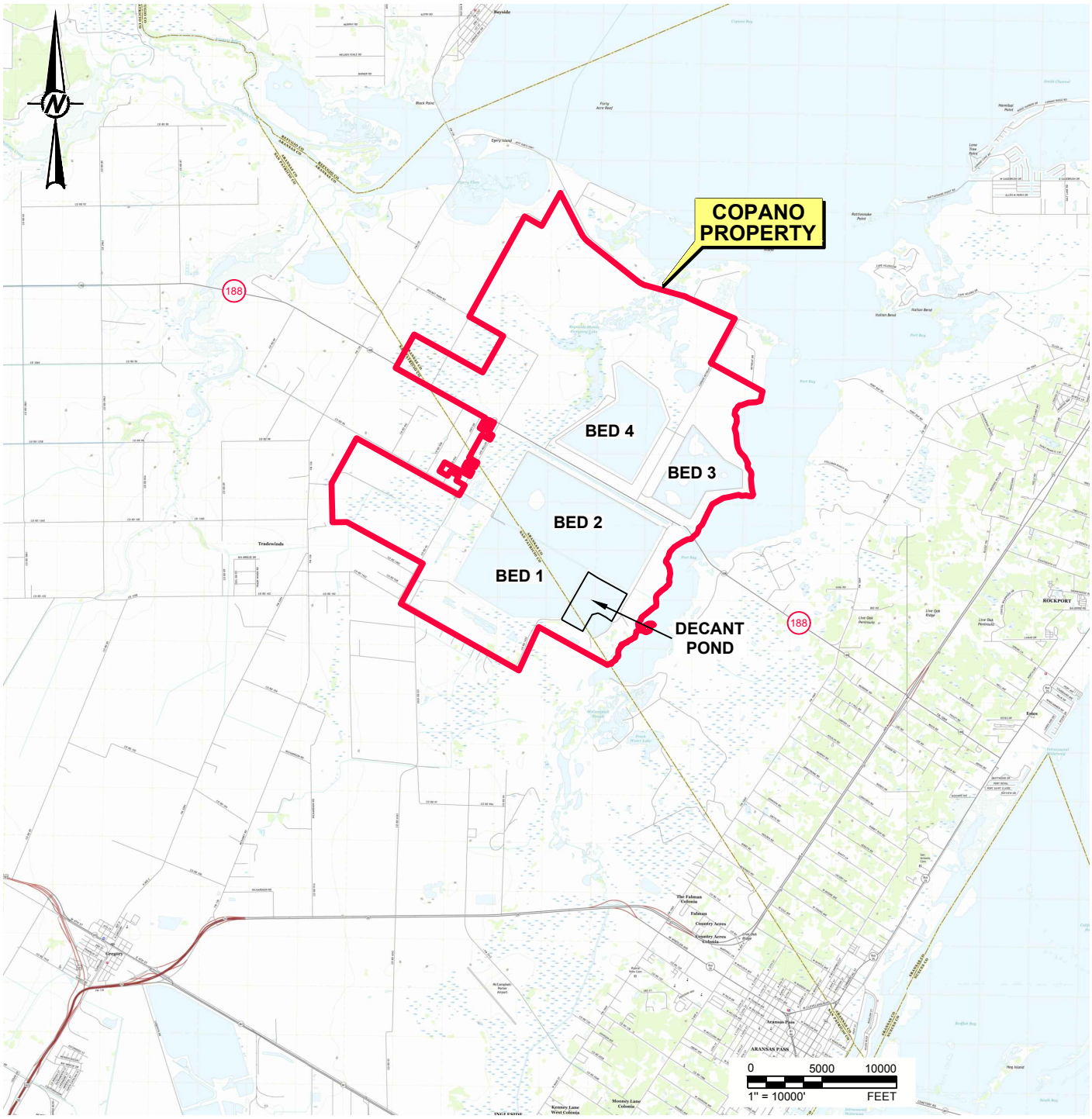
Material Description	Source of Material	Quantity During Reporting Period	Placement Location	Approx. Total Quantity Since May 2018
Surface Water	Bed 2	0 gallons	N/A	132,612,000 gallons
Soil	On-Site Source	0 cubic yards	N/A	355 cubic yards
Hay	Off-Site Suppliers and Ranch	0 bales	N/A	212 bales

3.0 PLANNED ACTIVITIES

During the next reporting period, current operations at the Copano site will continue. All materials placed within the beds will continue to be documented and reported to the TCEQ.

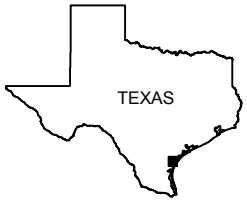
Maintaining adequate water elevations and placement of materials into the beds will continue for the purpose of controlling dust and foam. Placement of materials within Bed 1, including fertilizer and seed mix will continue to occur for the purpose of improving conditions to support vegetative growth and promote clean stormwater runoff. CE currently has existing stock or orders for elemental sulfur, hay, cotton gin residuals, gypsum, mulch, seed, and fertilizer and will continue to receive effluent water and sludge (river mud) from the City of Aransas Pass and San Patricio Municipal Water District, respectively, for at least the next several reporting periods.

Figures



REFERENCE(S)

BASE MAP TAKEN FROM WWW.TNRIS.GOV, RINCON BEND, BAYSIDE, ROCK PORT, GREGORY, ARANSAS PASS, AND ESTES, TX 7.5 MIN. USGS QUADRANGLE DATED 2019.



QUADRANGLE LOCATIONS

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY

TITLE
LOCATION MAP

CONSULTANT

wsp

YYYY-MM-DD	2023-12-15
DESIGNED	AJD
PREPARED	AJD
REVIEWED	SEG
APPROVED	MKW

PROJECT NO. 31404347.504 | REV. 0 | FIGURE 1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

0 1 in

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Path: \\golder.gds\complexdata\office\Texarkana\Projects - Victoria_20181811309 - ALCOA CE Ranch\2021-06\ | File Name: FIG 1 - Location Map.dwg

LEGEND / MATERIALS APPLIED DURING REPORTING PERIOD

- APPROXIMATE PROPERTY/RIGHT OF WAY BOUNDARY
- GRASS/VEGETATION COVER
- MULCH APPLIED
- GRASS SEED APPLIED (WINTER RYE)
- SYNTHETIC GYPSUM APPLIED
- BORROW SOIL APPLIED
- COMPOST
- COTTON GIN RESIDUALS STOCKPILE
- ALL WEATHER ACCESS ROADWAY

REFERENCE(S)

1. MAP BASED ON AERIAL PHOTOMETRIC MAP BY LANMON AERIAL PHOTOGRAPHY, FLOWN OCTOBER 23, 2019.

0 900 1800
1" = 1800' FEET

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY

TITLE
SITE MAP

CONSULTANT

YYYY-MM-DD	2024-12-18
DESIGNED	AJD
PREPARED	AJD
REVIEWED	SEG
APPROVED	MKW

PROJECT NO. 31404347.0366 | REV. 0 | FIGURE 2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

APPENDIX A

Aerial Photographs of Bed 1

APPROXIMATE SCALE:

0 400 800

1" = 800' FEET

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY

TITLE
BED 1 AERIAL PHOTO (FLOWN 6/2/24)

CONSULTANT

YYYY-MM-DD	2024-12-18
DESIGNED	AJD
PREPARED	AJD
REVIEWED	SEG
APPROVED	SEG

PROJECT NO. 31404347.0366 | REV. 0 | FIGURE 1A

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1 in

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APPROXIMATE SCALE:

0 400 800

1" = 800' FEET

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY

TITLE
BED 1 AERIAL PHOTO (FLOWN 8/25/24)

CONSULTANT

YYYY-MM-DD	2024-12-17
DESIGNED	AJD
PREPARED	AJD
REVIEWED	SEG
APPROVED	SEG

PROJECT NO. 31404347.0366 | REV. 0 | FIGURE 2A

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