

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

May 6, 2020

Via Email

Mr. Timothy C. Perdue, CHMM
Waste Program Manager
Texas Commission on Environmental Quality – Region 14
NRC Building Suite 1200
6300 Ocean Drive, Unit 5839
Corpus Christi, TX 78412-5839

Re: Copano Site
VTN 733900 Corrective Action Plan – Schedule Update
CE Ranch LLC, 1 County Road 93, Gregory (San Patricio County), Texas
Regulated Entity No: 1049143312, TCEQ SWR No. 30097;
EPA ID No. TXD008129983

Attached for your review is an update for the above-referenced Corrective Action Plan that addresses foam control at the Copano Site. Attached are the following:

- Table 5.1 has been updated based on the current status of the corrective actions and associated activities that have taken place through early May 2020.
- Aerial photos that compare prior water levels in Beds 3 and 4 to current levels; although some minor amount of foam continues to accumulate, wave action is greatly reduced and foam dissipation can occur more readily along the exposed bed surface during high wind conditions. Levee repairs for both beds continues with Bed 4 to be substantially complete by June 4, 2020 and Bed 3 repair work to be substantially complete during January 2021.

In addition to those updates, several Bed 2 foam barrier and pumping systems are being evaluated to determine an optimum approach. Photos below show that initial trials have been successful (note that during this trial period, spraying using mobile equipment will continue):



Foam visible along the shoreline of Bed 2 prior to spraying.

Mr. Timothy C. Perdue, CHMM
May 6, 2020



Foam dissipation along the shoreline after spraying.



Deployment and evaluation of the floating barrier system.

Should you have any questions or wish to discuss, please do not hesitate to contact me at 412.585.7502 or Ronald.Morosky@Alcoa.com.

Sincerely,

Ronald M. Morosky
Operations Manager

Attachments: Updated Table 5.1
Figure 1 – Bed 3
Figure 2 – Bed 4

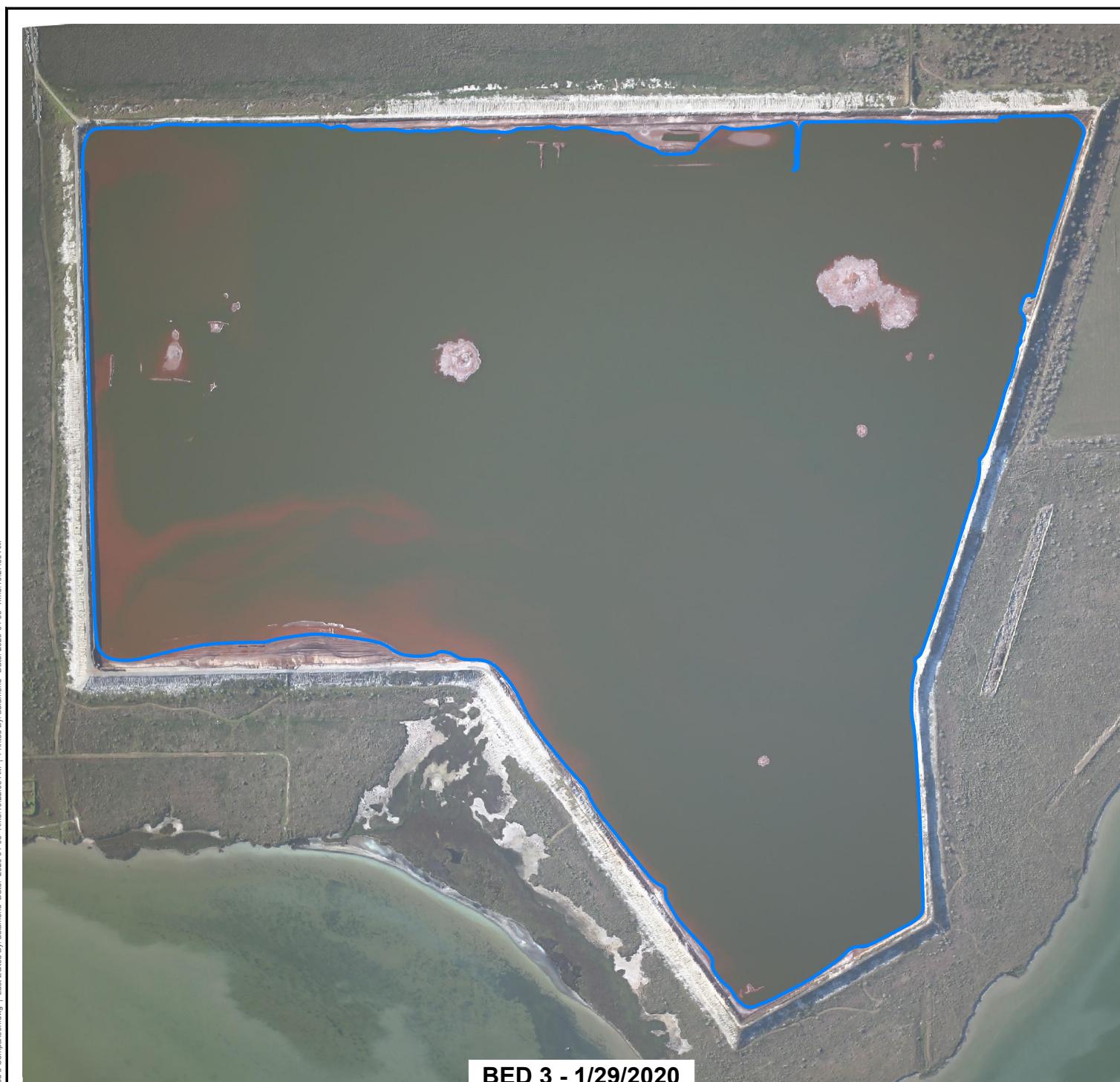
cc: Keith Schmidt, CE Ranch
Susan Clewis, TCEQ
Eleanor T. Wehner, TCEQ
Marissa Wooten, TCEQ
Matt Wickham, Golder

Corrective Action Plan - Foam Control and Mitigation
 Copano Beds Site
 Aransas and San Patricio Counties, Texas
 May 6, 2020

TABLE 5.1 IMPLEMENTATION SCHEDULE - MONTHLY UPDATE

Item	Phase	Corrective Action	Start	Completion	Current Percent Complete (%)	Comments
4.1	Foam Sampling & Analysis					
	1	Obtain Foam Samples from Beds 2, 3 and 4				Task on hold until it is determined whether sampling is needed
4.2	Lower Water Level - Bed 3					
	1	Pumping Water from Bed 3 to Bed 2	January 20, 2020	March 13, 2020	100%	The water level was reduced to elev. 22.4' during mid-March 2020.
4.2	Levee Repairs - Bed 3					
	1	Surveying and Engineering Design/Award	January 6, 2020	May 6, 2020	100%	
4.3	2	Construction Activities	June 2020	January 2021	0%	Project work expected to require up to six months with completion in Jan 2021
	Use of Defoamer Agent					
4.3	1	Spraying of Defoamer Agent Using Mobile Equipment	February 6, 2019	Ongoing	N/A	Spraying continues when weather conditions are favorable for foam generation.
4.4	Fencing					
	1	Silt Fence Installation (Bed 4)	February 21, 2020	February 22, 2020	100%	
4.4	Levee Repairs - Bed 4					
	1	Surveying and Engineering Design/Award	March 1, 2019	June 15, 2019	100%	
4.4	2	Construction Activities	August 1, 2019	June 2020	75%	Repair work is on schedule to be complete by June 4, 2020.
4.5	Foam Barrier Systems - Bed 2					
	1A/2A	Order/Deliver Foam Barrier Systems (18" & 24" Brute Boom)	February 12, 2020	April 17, 2020	100%	
	3A	Deployment of Barrier Systems	April 20, 2020	April 30, 2020	100%	Deployed within Bed 2 and will be evaluated based on performance.
	1B	Obtain and Assess Turbidity Curtains	February 5, 2020	February 19, 2020	100%	Further work on this task on hold until it is determined whether this equipment is needed
	1C/2C	Obtain and Deploy Pump & Spray Piping System	February 10, 2020	February 28, 2020	100%	
	4	Evaluation and possible upscale of barrier and pump systems	March 9, 2020	June 2020	50%	Evaluation of the pump/spray and floating barrier systems is expected to be complete by June 4, 2020; upscale will commence when an optimum system is selected.

Task is ongoing and/or with expected completion as noted
 N/A Not Applicable



BED 3 - 1/29/2020

LEGEND
— EDGE OF WATER SURFACE

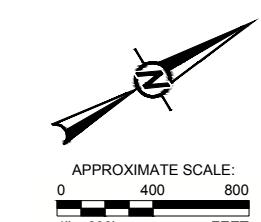


BED 3 - 3/27/2020

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY
CORRECTIVE ACTION PLAN
FOAM CONTROL AND MITIGATION

TITLE
BED 3 WATER LEVELS



GOLDER

PROJECT NO.
18111309

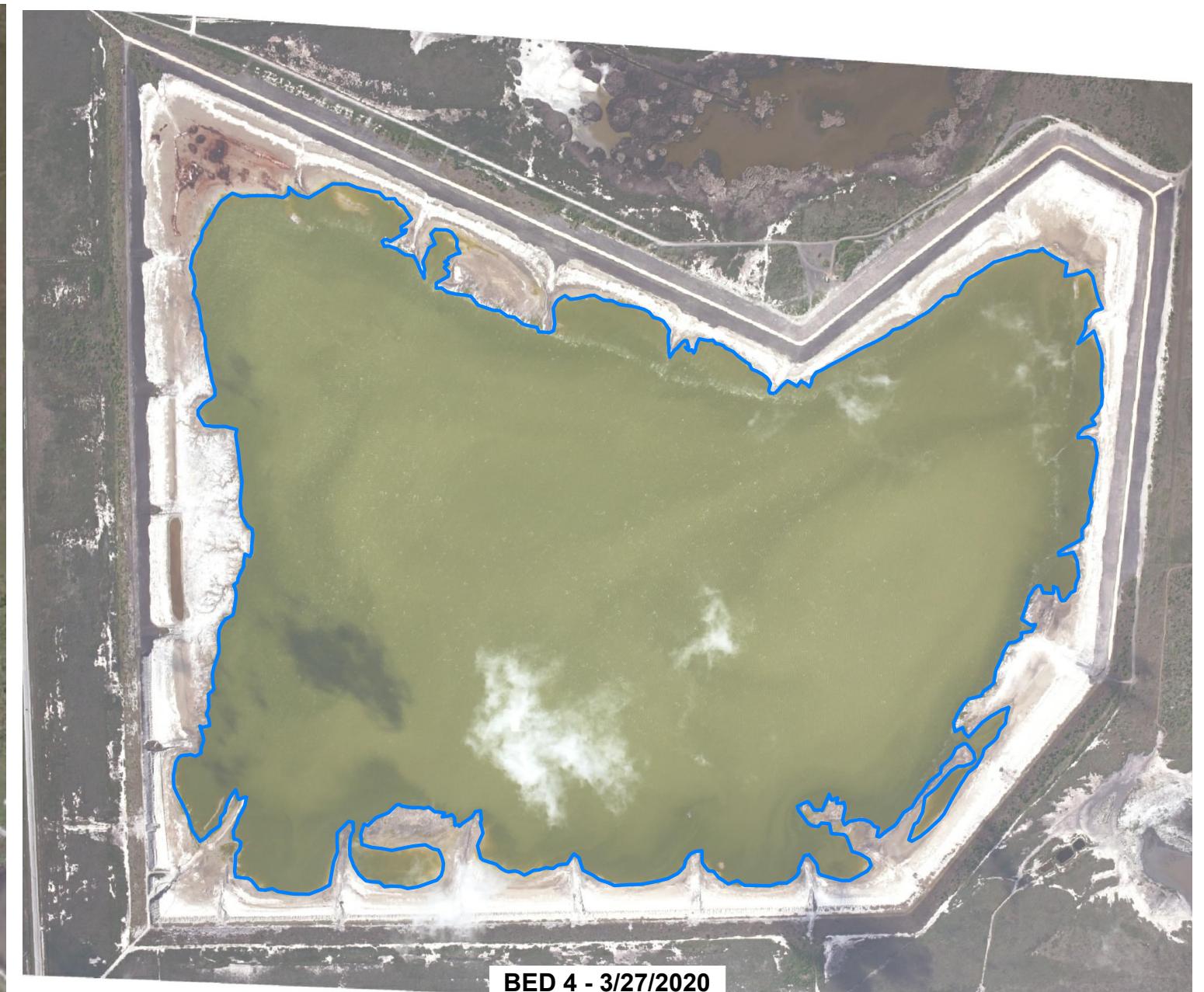
YYYY-MM-DD
2020-04-08
DESIGNED AJD
PREPARED AJD
REVIEWED SG
APPROVED SG

REV.
0



BED 4 - 4/25/2019

LEGEND
— EDGE OF WATER SURFACE

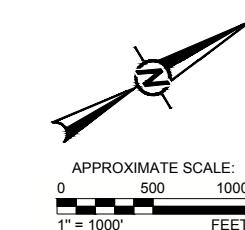


BED 4 - 3/27/2020

CLIENT
CE RANCH LLC

PROJECT
COPANO PROPERTY
CORRECTIVE ACTION PLAN
FOAM CONTROL AND MITIGATION

TITLE
BED 4 WATER LEVELS



APPROXIMATE SCALE:
0 500 1000
1" = 1000' FEET



PROJECT NO.
18111309

REV.
0

FIGURE
2