

NOTIFICATION OF ENVIRONMENTAL CONCERN (NOEC) INVESTIGATION REPORT

GENERAL INFORMATION

NOTIFICATION NUMBER 021221-NH-0845	NDEQ ID / Program ID 84069
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INSPECTOR
Mark Pomajzl

INSPECTION DATE 2-12-2021	TIME/ARRIVAL 1:00pm	TIME/DEPARTURE 5:00pm	WEATHER Cloudy, snow	TEMP 2F
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PROBLEM LOCATION ☒ Same as NEC Problem Location

NAME Scott Tingelhoff	PROGRAM ID # 84069
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POSITION/TITLE
General Manager

BUSINESS NAME
AltEn, LLC

ADDRESS 1344 County Road 10	CITY Mead	COUNTY Saunders	STATE NE	ZIP CODE 68041
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QUARTER N1/2, SW1/4	SECTION 12	TOWNSHIP N 14	RANGE E 8
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DIRECTIONS TO SITE From Airport, Highway 92/77 (Rd M) -3E, Rd 13-0.75, W Side	LATITUDE 41.19714	LONGITUDE -96.48081
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RESPONSIBLE PARTY ☒ Same as NEC Responsible Party

NAME Scott Tingelhoff	PROGRAM ID # 84069
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POSITION/TITLE
General Manager

BUSINESS NAME
AltEn, LLC

ADDRESS 1344 County Road 10	CITY Mead	COUNTY Saunders	STATE NE	ZIP CODE 68041
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TELEPHONE NUMBER (H) 1-402-443-6262	TELEPHONE NUMBER (W)	TELEPHONE NUMBER (C)	EMAIL stingelhoff@mrgkc.com
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SITE OBSERVATIONS

WHAT IS THE PROBLEM? ☒ Same as NEC Observations

COMMENTS

There are two 4,000,000-gallon digesters that were filled with thin stillage from the ethanol plant and manure from the adjacent feedlot to generate methane to fuel the ethanol plant boilers. The thin stillage and manure are about three years old. Cold temperatures froze a pipe and an unknown quantity of thin stillage and manure spilled to the adjacent road ditch. The thin stillage may contain pesticides from the treated seed corn stock.

WHERE AT THE SITE IS THE PROBLEM? ☒ Same as NEC Observations

COMMENTS

Four-million-gallon digester at SE corner of property. Mr. Tingelhoff called NSP about 0300 Friday morning at (402) 471-4545. (old spill reporting number) but no option to report spill. Called back to NRC and was given NDEE 800 # and NEMA # by NRC; but neither answered. Mr. Tingelhoff got NDEE answer machine but did not wait for after-hours #.

OTHER PERTINENT DETAILS: Mr. Tingelhoff called NSP about 0300 Friday morning at (402) 471-4545. (old spill reporting number) but no option to report spill. Called back to NRC and was given NDEE 800 # and NEMA # by NRC; but neither answered. Mr. Tingelhoff got NDEE answer machine but did not wait for after-hours #.

20210010573

The Department received a notice of environmental concern (NECO) on 8:45am stating that due to cold weather a pipe froze causing an unknown quantity of thin stillage and manure to leak into an adjacent ditch. To assess and document the spill, I arrived on site on or about 1:00pm. I went into the facility office and met with Mr. Ken Peterson. I told Mr. Peterson I was there to investigate the spill. Mr. Peterson provided the tour. At no time was access denied.

Observation Point 1 (OP1), Map 1

Mr. Peterson drove me to the digester. Upon arrival I observed wastewater conveying from the southwest side of the digester, photo 1. I asked Mr. Peterson if the break is located on the southwest side. Mr. Peterson stated no and drove to the southeast corner. There is heavy flow cascading over the hill into the adjacent ditch, photos 2 and 3. We then exited the truck and walked to the digester. The ruptured pipe is located on the east side splashing and spraying against the digester, photo 4. The surrounding area east, west and north are filled with wastewater, photos 5 and 6. I asked Mr. Peterson if the tank was full. Mr. Peterson confirmed the tank contained four million gallons. I asked what containment activities have been employed. Mr. Peterson stated the break is below ground. The water pressure and break area are making management difficult. Mr. Peterson stated they installed two trash pumps, photos 7 and 8.

Observation Point 2 (OP2), Map 1

Mr. Peterson stated they are in process of adding an additional larger pump downstream, photo 9. Mr. Peterson did not know how much water had been pumped into the emergency lagoon. The storm water ditch meanders around the emergency lagoon and has overwhelmed the ditch creating a lake adjacent to the west side of Mead Cattle and east of the biochar process, photos 10 and 11.

Observation Point 3 (OP3), Map 1

Mr. Peterson then showed me their makeshift dam made of biochar supersacks. Early during the spill, the facility dumped sacks of biochar into the ditch. Wastewater has meandered around the east side of the emergency lagoon and is flowing east on the north side of Mead Cattle. Mr. Peterson stated that the dam did slow the flow but eventually breached, photo 12 and 13.

Observation Point 4 (OP4), Map 2

I then drove to the culvert that exits the facility. The culvert is located on the southeast side of the property. When I arrived, I met representatives from the University of Nebraska – Lincoln (UNL). I observed UNL installing plastic, bales and cement (rip-rap) in attempt to hold back the flow, photos 14 and 15.

Observation Point 5 (OP5), Map 2

The flow continued through the culvert and then entered UNL property. Prior to investigating UNL property, I met with Sheldon Brummel (UNL). Mr. Brummel agreed to escort me to various locations to document flow. Mr. Brummel provide access to the first culvert site. I observed dark colored water and odor near a depth finder. Mr. Brummel stated that they have sampled the location all day and the depth has steadily increased, photo 16. I took photos from this area documenting the flow and dark colored water, photo 17.

Observation Point 6 (OP6), Map 2

Mr. Brummel drove farther downstream. I again observed flow, dark colored water and noted odor, photo 18.

Exit Interview and Exit Summary

I then spoke to Mr. Tingelhoff and Mr. Peterson. Mr. Tingelhoff explained that he called the EPA and NSP about 3:00am. Mr. Tingelhoff also explained that he attempted to call the NDEE. The number he called was an old number with no option to report spill. Mr. Tingelhoff did call the NDEE at 8:45 am to report the incident. Mr. Peterson did state that they have been sampling. I requested that AltEn share the lab results with NDEE. I explained that I was documenting and accessing the situation and that further agency discussion is needed to determined compliance. I filled out the exit summary form and provided Mr. Tingelhoff a copy.

CONCLUSION:

The south digester containing thin stillage and manure suffered a pipe break reportedly due to freezing conditions. An estimated four million gallons of liquid was released onto surface water. The spill flowed into a storm water ditch adjacent to the digester onto neighboring UNL property. AltEn had attempted to contain the spill by constructing a dam made of biochar supersacks, which was ineffective. The facility also installed trash pumps along the ditch attempting to pump into the neighboring emergency lagoon. A dam was also constructed at a culvert located on the southeast side of the property. The NDEE will determine if additional actions are needed.

Attached:

- Photos
- GIS Maps
- Exit Summary

Inspector: Mark Pomajzl

Date: 2-18-2021

ATTACHMENT I Photographs

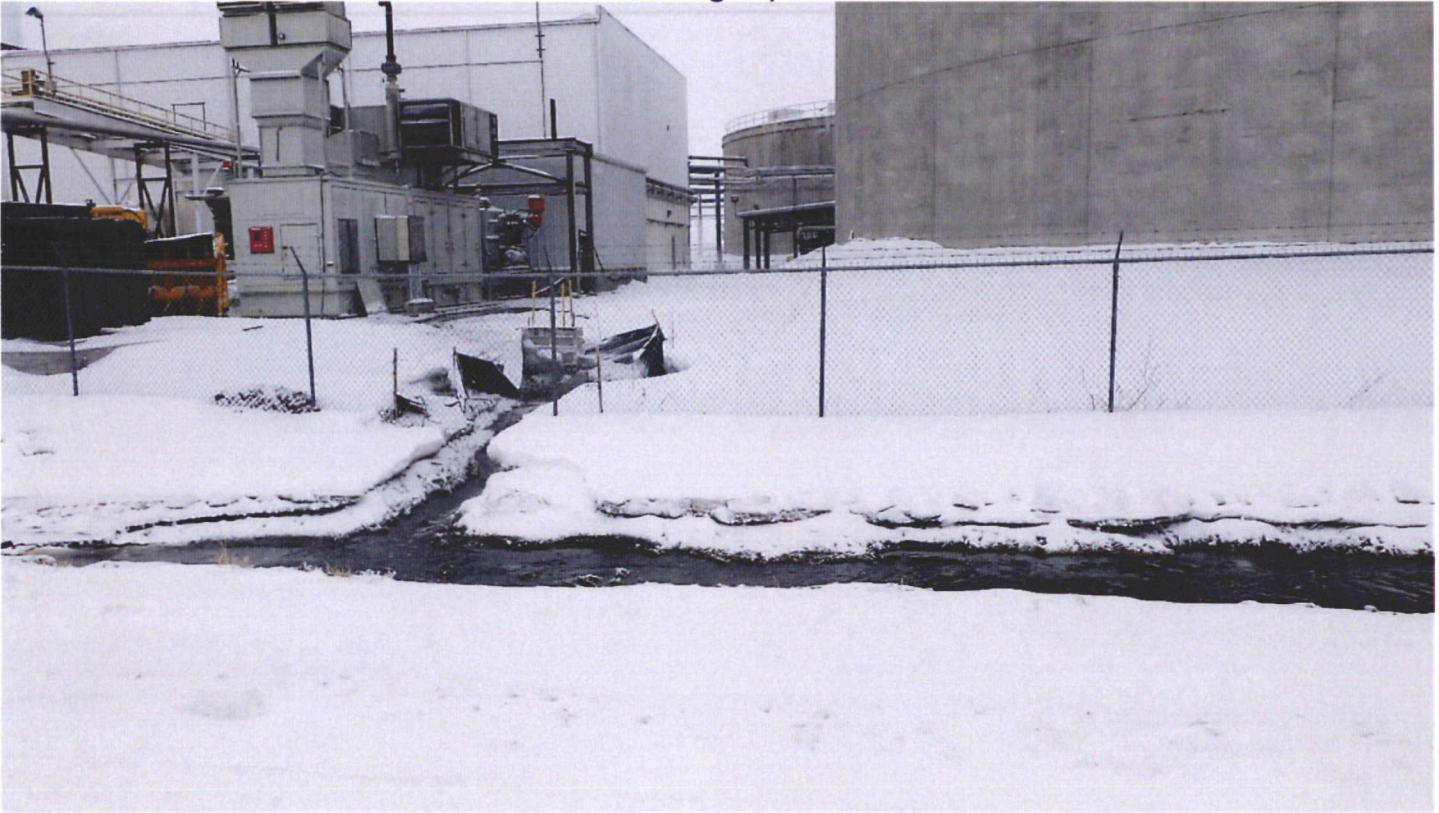


Photo 1

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southwest corner of the digester

Direction Facing: North

Description: This photo depicts water flow from the storm water conveyance system. Water is entering the ditch flowing east along the south side of the digester.



Photo 2

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southeast side of the digester

Direction Facing: North

Description: This photo depicts cascading water exiting the southeast side of the digester.



Photo 3

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southeast side of the digester

Direction Facing: East

Description: This photo depicts water entering the ditch and flowing along the emergency lagoons. Also depicted is the trash pumps installed to transport water into the emergency lagoon.



Photo 4

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southeast side of the digester

Direction Facing: North

Description: This photo depicts the damaged area (arrow). Water is quickly exiting the digester creating ponding and discharge.



Photo 5

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southwest side of the digester

Direction Facing: Northeast

Description: This photo water flowing behind the digester. Wastewater is flowing behind the digester (arrow). Flow continued southwest and into the conveyance system depicted in photo 1.



Photo 6
NOEC Inspection Report
Date Taken: 2-12-2021
Photographer: Mark Pomajzl
Facility Name/ Project Name: AltEn
Facility IIS number / Project identifier: IIS: 84069
Location: Southwest side of the digester
Direction Facing: Northeast
Description: This photo is pooled water west of the digester.



Photo 7

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southwest side of the digester

Direction Facing: East

Description: This photo depicts the trash pumps used to transport water into the emergency lagoon.

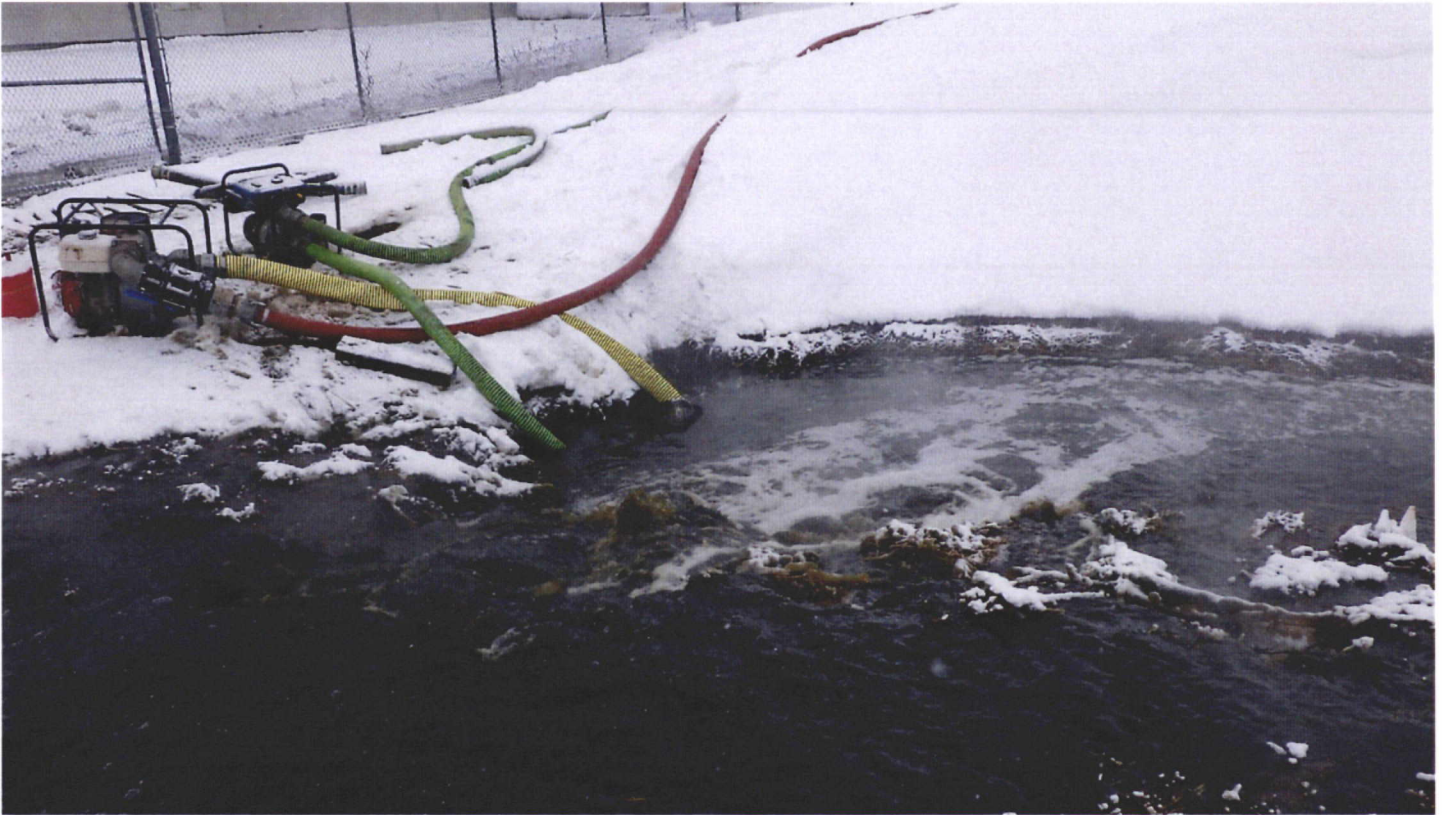


Photo 8

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: Southwest side of the digester

Direction Facing: North

Description: This photo depicts the trash pumps used to transport water into the emergency lagoon.



Photo 9

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: East of the spill site along the emergency lagoon

Direction Facing: North

Description: This photo depicts AltEn personnel working to install an additional trash pump. The pump is being installed approximately 100 yards east of the pumps depicted in photo 8.



Photo 10

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: East of the spill site along the emergency lagoon

Direction Facing: East

Description: This photo depicts the creek flooding the road entering Mead Cattle.



Photo 11

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: West of Mead Cattle

Direction Facing: East

Description: This photo depicts water flooding the road and ponding on the south side.



Photo 12

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: North of Mead Cattle

Direction: West

Description: This photo depicts wastewater flowing east along Mead Cattle. The arrow depicts flow direction.



Photo 13

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: North of Mead Cattle

Direction: South

Description: This photo depicts a makeshift dam made of biochar supersacks. This photo also depicts the breach that occurred on the north side (arrow)



Photo 14

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: County Road J and 9

Direction: Northwest

Description: This photo depicts UNL personal installing plastic and bales to dam the culvert.



Photo 15

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: County Road J and 9

Direction: Northwest

Description: This photo depicts UNL using a backhoe to push a bale and plastic into place.



Photo 16

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: UNL property

Direction: East

Description: This photo depicts UNL property adjacent county road 9. This photo is a depth finder that UNL installed to measure flow. Mr. Brummel (UNL) stated that water depth had been rising 2 inches per hour.



Photo 17

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: UNL property

Direction: South

Description: This photo is from the same area as the above photo. This photo is facing south from onto the culvert. I observed dark water and odor at this location.



Photo 18

NOEC Inspection Report

Date Taken: 2-12-2021

Photographer: Mark Pomajzl

Facility Name/ Project Name: AltEn

Facility IIS number / Project identifier: IIS: 84069

Location: UNL property

Direction: South

Description: This photo depicts an area deep into UNL property. I observed flow, dark water and odor.

ATTACHMENT 2

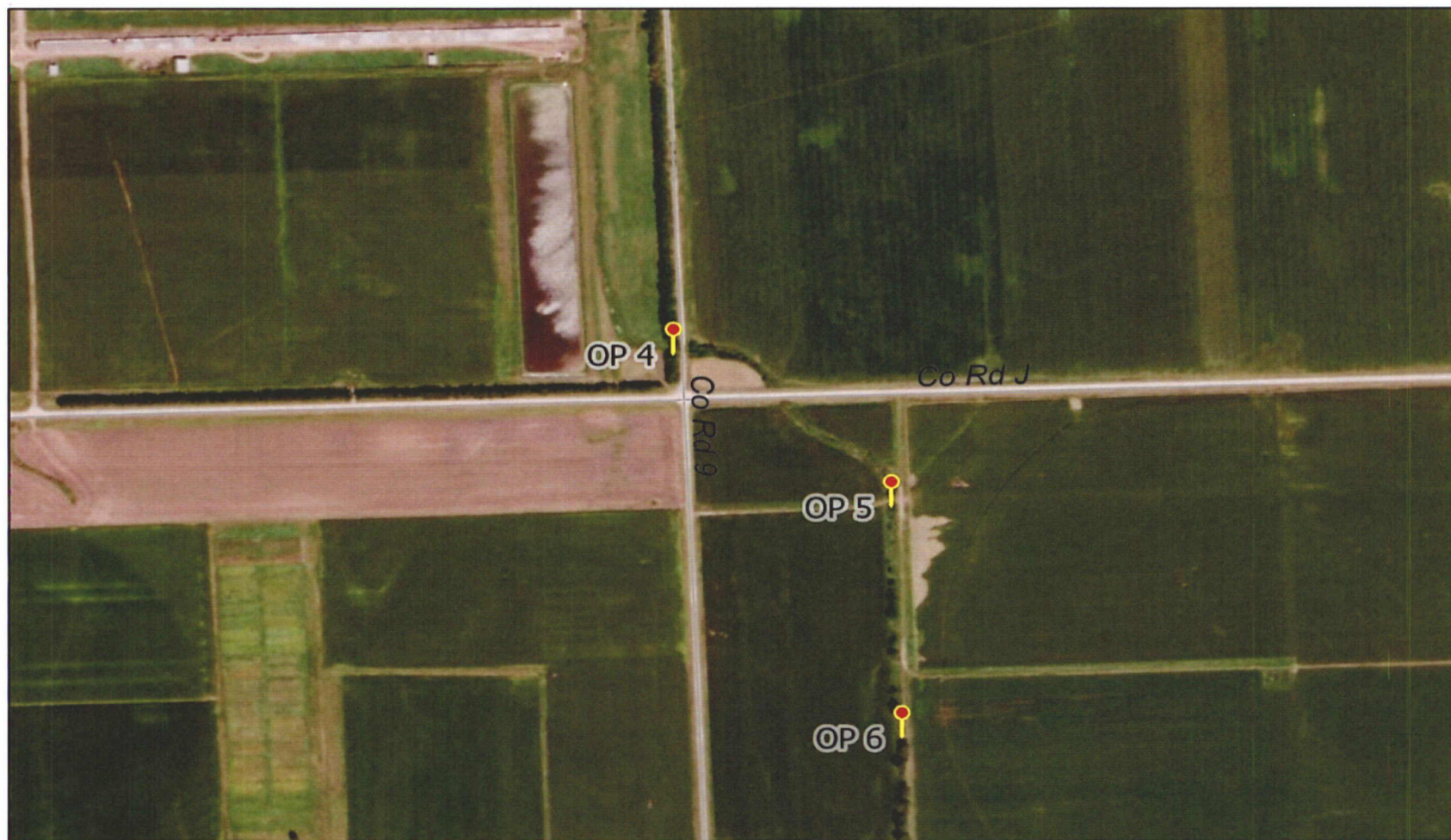
AltEn LLC February 12, 2021
Observation Points Map 1



Address: 11344 County Road 10, Mead NE
NDEQ ID: 84069
Program ID: NE0137634

0 75 150 300 450 600 750
Feet

AltEn LLC February 12, 2021
Observation Points Map 2



Address: 11344 County Road 10, Mead NE
NDEQ ID: 84069
Program ID: NE0137634

0 350 700 1,400 2,100 Feet

Attachment 3

NEBRASKA DEPT. OF ENVIRONMENT AND ENERGY		Inspection and Assistance Exit Summary	
NDEE ID: <u>8110</u>	NDEE Program & ID: _____	NDEE Notification #: _____	
<input type="checkbox"/> Inspection/Other <input type="checkbox"/> Compliance Assistance Visit (CAV) <input type="checkbox"/> Permit Assistance Visit (PAV)			
Facility/Operation Name: <u>Aspen</u>			
Address: _____			
City/Town: <u>Wichita</u> County: <u>Sedgewick</u> State of Nebraska.			
Owner/Occupant/Operator Inspection Contact(s): <u>Ken Portner</u>			
Inspector: <u>Mark Pomajst</u>	Phone No: <u>402-477-1116</u>	E-Mail address: <u>Mark.Pomajst@nebraska.gov</u>	
Mailing Address: Department of Environment and Energy, PO Box 98622, Lincoln, Nebraska 68509-8922			
Inspection Date: <u>2/28/11</u>		Start Time: <u>1:00</u>	End Time: <u>3:40</u>
<input type="checkbox"/> No concerns observed <input checked="" type="checkbox"/> Further agency discussion needed to determine compliance			
<input checked="" type="checkbox"/> Concerns observed: <u>- Investigated & documented oxygen spill.</u>			
<input checked="" type="checkbox"/> Actions to be performed immediately or as soon as reasonably practical: <u>- Keep on updated on the spill & program.</u>			
<p>Please notify the Inspector when the above actions are completed.</p> <p>The Department will provide a final inspection report within an agency average of 14 days of the inspection date. The final inspection report will contain a complete list of any alleged violations. This inspection exit summary does not preclude any other legal action by the Nebraska Department of Environment and Energy and your prompt attention to the documented concerns will be considered in assessment of your voluntary compliance. This summary was left with: <u>45000 Maychaff</u>. Please contact the Inspector if you have any questions concerning this inspection and assistance exit summary.</p>			
<u>[Signature]</u> Inspector Signature		<u>[Signature]</u> Inspection Contact Signature	