

BEFORE THE NEBRASKA DEPARTMENT OF ENVIRONMENT AND ENERGY

IN THE MATTER OF)	
AltEn, LLC,)	CASE NO. 3546
)	
FID # 84069)	EMERGENCY COMPLAINT
)	AND ORDER
Respondent.)	

This Emergency Complaint and Order is issued by the Director of the Department of Environment and Energy (hereinafter referred to as "Department") pursuant to Neb. Rev. Stat. § 81-1507(4) of the Environmental Protection Act (Act), Neb. Rev. Stat. § 81-1501 et seq. (Reissue 2014, Supp. 2015) which authorizes the director whenever the director finds that an emergency exists to require immediate action to protect public health and the environment. The Department is the agency of the State of Nebraska charged with the duty pursuant to Neb. Rev. Stat. § 81-1504(1) to exercise exclusive general supervision of the administration and enforcement of the Environmental Protection Act, and all rules and regulations and orders promulgated under the Act. The Respondent is AltEn, LLC, (hereinafter "Respondent"), whose Facility is located in Mead, Saunders County, Nebraska.

The complaint below sets out the facts establishing the existence of an emergency, and the order specifies the immediate action that must be taken to abate the emergency. This Emergency Complaint and Order is effective immediately. The Respondent shall be afforded the opportunity for a hearing upon application in writing to the director of the Department, such hearing to take place as soon as possible but not later than ten days after a request is made.

I. COMPLAINT

1. Respondent is AltEn, LLC, owner of the ethanol plant (hereinafter "Facility") at 1344 County Road 10, Mead, Nebraska 68041. The legal description is N SW Section 12



Township N 14 Range E 08, Saunders County, Nebraska. AltEn, LLC, is a limited liability company registered to do business in Nebraska and organized in the state of Kansas.

2. The Respondent's ethanol plant uses seed corn treated with pesticides to produce ethanol. The waste products include wastewater and distiller's grain, both containing high levels of pesticide residue.

3. Respondent's Facility discharges processed wastewater to three lagoons. The Department issued an Emergency Complaint and Order to the Respondent dated February 4, 2021, which among other provisions cited therein, required the Facility to immediately cease discharge of industrial wastewater into its wastewater lagoons and take whatever action is necessary to ensure that the Facility and its equipment are operating in compliance with State law, regulations, and permits. Respondent was further prohibited from removing industrial wastewater from its wastewater lagoons except in accordance with standards and conditions for disposal of industrial wastewater laced with pesticides and only at a location and in a manner approved by the Department.

4. On February 12, 2021, at approximately 8:45 am (CT), the Department was notified of a reported release of waste materials purportedly consisting of thin stillage and manure from a four-million gallon digester tank at the Facility. See Attachment A, hereby incorporated into this Order. The discharge of these waste materials was uncontrolled and unpermitted and flowed onto and off the Facility property into a drainage ditch and onto neighboring property owned by the University of Nebraska approximately 4.5 miles from the digester tank.

5. On February 12, 2021, employees from the Department conducted a site visit and collected samples at the Facility. See Attachment B, hereby incorporated into this Order.

6. On February 17, 2021, the Department issued a Letter of Noncompliance (LNC) to the Facility alleging a violation of Neb. Rev. Stat. § 81-1506(1) and requiring the Facility to immediately:

- A. Take action to prevent further migration of the digester material. Construct and maintain secure barriers to prevent further migration of digester material downstream. The final barrier ("Furthest extent of spill observed" . . .) will be located directly below the farthest downstream migrated material location. Monitor existing and constructed barriers daily for integrity and effectiveness.
- B. Take action to construct and maintain secure barriers to prevent migration of digester material from AltEn, LLC property.
- C. Take action to construct secondary containment for the second digester. Conduct and document hourly inspections of the digester for leaks or potential failure. Take action to correct leaks or potential failure upon discovery.
- D. Take action to prevent the comingling of snow melt with digester material. Clear accumulated snow and new snowfall away from digester material. Locate the snow where melt water will not comeingle with released material. Snow contaminated or in contact with released material is considered part of the release; and
- E. By 12:00 p.m. February 18, 2021 provide a written plan describing the recovery and transportation of released digester material. Identify the method and location of disposal for this material. Include the start date of activity and a daily schedule of implementation. See Attachment C, hereby incorporated into this Order.

7. Employees from the Department conducted site visits at the Facility between February 13 and 19, 2021, to monitor the situation, observe activities, and assess compliance with the February 4, 2021, Emergency Complaint and Order Case No.3540, and the Act. See Attachment D, hereby incorporated into this Order. A contractor for the United States Environmental Protection Agency (USEPA) was on site at the Facility on February 13 and 14, 2021, to monitor the situation, observe activities, and take samples.

8. On February 18, 2021, the Respondent submitted a response letter to the Department's LNC outlining the Facility's plan and the Department responded with comments by letter on the same date. See Attachment E, hereby incorporated into this

Order. To date, Respondent's activities to contain and respond to the discharge by pumping have not been effective.

9. The Respondent is a person as defined in Neb. Rev. Stat. § 81-1502(10).

10. Neb. Rev. Stat. § 81-1506(1)(a) makes it "unlawful for any person to cause pollution of any air, waters, or land of the state or to place or cause to be placed any wastes in a location where they are likely to cause pollution of any air, waters, or land of the state."

11. Neb. Rev. Stat. § 81-1506(2)(d) makes it unlawful for any person to "construct, install, or operate any industrial, commercial, or other facility or extend, modify, or add to any such facility if the operation would cause an increase in the discharge or emission of wastes into the air, waters, or land of the state or would otherwise cause an alteration of the physical, chemical, or biological properties of any air, waters, or land of the state in a manner that is not lawfully authorized."

12. Neb. Rev. Stat. § 81-1502(14) defines "wastes" to mean sewage, industrial waste, and all other liquid, gaseous, solid, radioactive, or other substances which may pollute or tend to pollute any air, land, or waters of the state" and in subsection (26) further defines "solid waste" in part to "mean any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, and mining operations and from community activities."

13. Neb. Rev. Stat. § 81-1502(20) states "Water pollution shall mean the manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of water."

14. Neb. Rev. Stat. § 81-1502(21) states "Waters of the state shall mean all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems,

drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state.”

15. Neb. Rev. Stat. § 81-1502(19) defines “land pollution” to “mean the presence upon or within the land resources of the state of one or more contaminants or combinations of contaminants, including, but not limited to, refuse, garbage, rubbish, or junk, in such quantities and of such quality as will or are likely to (a) create a nuisance, (b) be harmful, detrimental, or injurious to public health, safety, or welfare, (c) be injurious to plant and animal life and property, or (d) be detrimental to the economic and social development, the scenic beauty, or the enjoyment of the natural attractions of the state.”

16. The Director finds that the Respondent has placed wastes or caused wastes to be placed in a drainage ditch which constitutes a water of the state, and other locations where such wastes are likely to cause pollution of the waters and land of the state, in violation of Neb. Rev. Stat. § 81-1506(1)(a) and Neb. Rev. Stat. § 81-1506(2)(d).

17. The Director finds that Respondent’s failure to immediately contain the unpermitted and uncontrolled release and discharge of wastes described herein is creating an imminent and substantial danger and risk to human health and the environment.

18. The Director finds that Respondent’s actions described herein and failure to adequately contain and respond to the release and discharge of wastes has caused damage to land and waters of the state that has yet to be adequately remediated and is creating a further risk to downstream property owners.

19. The Director finds that the Respondent has failed to operate its Facility to adequately maintain and provide adequate secondary containment for the two digesters at its Facility, which failure caused the February 12, 2021, release and threatens a further release and discharge of digester wastes to migrate off the Facility in a manner that

presents an emergency and imminent and substantial threat to human health and the environment.

20. The Director further finds that the Respondent, by its actions, has caused and will continue to cause pollution to the waters and land of the state in violation of state law.

21. The Director finds that an emergency exists requiring immediate action to protect the public health and welfare and that the Facility must take the following compliance actions to mitigate and remediate the pollution event and prevent injury and exposure to the public and the environment.

II. COMPLIANCE ORDER

IT IS HEREBY ORDERED THAT:

22. Respondent must immediately fortify and secure barriers to the migration of and prevention of any further discharge of wastes, wastewater, and pollutants beyond the containment barrier designated as Barrier 3 by the Respondent in Attachment E, taking into account the influence of melting snow and potential rainwater that may occur.

23. Respondent is prohibited from and must immediately prevent the introduction of any additional water, wastewater, or waste material to drainage ditches and other areas off the Facility for any purpose including flushing wastes.

24. Respondent must take active steps to remove wastes, wastewater, and other discharged materials from drainage ditches and other areas both on and off the Facility by pumping, digging, excavating, vacuuming, or hauling by truck and removal to the Respondent's emergency wastewater lagoon or a location approved by the Department. Off Facility actions must be done only with the consent of the landowner.

25. Respondent must take measures to secure and protect the remaining second digester that still contains thin stillage and manure wastes to prevent a release of materials to the environment, including but not limited to berms and other secondary containment if

materials cannot safely be removed from the digester for disposal at an approved disposal facility.

26. Respondent must report to the Department in writing or by email on a daily basis, not later than 5:00 p.m. (CT), the amount of wastes, wastewater, and other materials removed from the drainage ditch and other areas where the discharge has reached in terms of volume in either gallons or cubic feet.

27. Respondent is prohibited from resuming its commercial and industrial operations until such time as it has been notified the discharged digester wastes have been sufficiently remediated that such operation may resume without further threat of harm to public health and the environment.

28. Respondent must provide access to Department employees, USEPA employees or contractors, and Department contractor, Terracon, for purposes of overseeing work conducted pursuant to the Order.

29. This Compliance Order does not supersede or invalidate the Emergency Complaint and Order, Case No. 3540, previously issued effective February 4, 2021, which remains in full force and effect.

30. Respondent shall promptly respond to any written communication by the Department with reference to this Emergency Complaint and Order. Any delay in responding to such communication shall be construed as non-compliance with this Order.

III. SUBMITTALS

31. Any information or verification required to be submitted to the Department pursuant to this Order shall refer to FID #84069 and shall be sent to:

Brad Pracheil
Division Administrator for Compliance and Inspections
Nebraska Department of Environment and Energy
PO Box 98922
245 Fallbrook Blvd.

Lincoln, NE 68509-8922
402-471-2186

IV. NOTICE OF OPPORTUNITY TO REQUEST A HEARING

32. In accordance with Neb. Rev. Stat. §18-1507(4) this Emergency Complaint and Order shall become effective immediately. The Respondent is required to comply with the Emergency Order upon receipt.

33. The Respondent may request a hearing by submitting a written request to the Director. The request for hearing may be filed by mail to: Jim Macy, Director, State of Nebraska Department of Environment and Environment, P.O. Box 98922, Lincoln, Nebraska 68509-8922, or may be delivered to the Department's Lincoln office located at 245 Fallbrook Blvd., Lincoln, Nebraska. Such hearing shall be scheduled as soon as possible but not later than ten days after the request is made. The Emergency Complaint and Order shall remain in effect pending any hearing and shall not relieve the Respondent from immediate compliance.

34. This Emergency Complaint and Order does not preclude the Department from pursuing additional remedial action and enforcement by administrative order for injunctive relief and penalties based on violations of the Act.

35. The Department further reserves the right to impose additional obligations to abate or eliminate the emergency or pollution caused by the Respondent.

Dated this 20th day of February, 2021.


Jim Macy
Director
Nebraska Department of Environment and Energy

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Emergency Order and Complaint, Case No. 3546, was served by certified United States mail, postage prepaid, return receipt requested this 22nd day of February, 2021, upon the Respondent's Registered Agent listed below at their mailing address:

Capitol Corporate Services, Inc.
1125 S. 103rd St.
Suite 800
Omaha, NE 68124


Lauren Triplett
Staff Assistant, Legal Division

ATTACHMENTS A - E

ATTACHMENT A

Notification of Environmental Concern

REPORT RECEIVED BY Neal Heil	DATE 02-12-2021	TIME 08:45 AM	REPORTED VIA Phone	NOTIFICATION NUMBER 021221-NH-0845	NDEQ ID # 84069
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ANONYMOUS REPORT	CONFIDENTIAL REPORT No	KEEP REPORTING PARTY INFORMED
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PROBLEM LOCATION

	PROBLEM LOCATION	RESPONSIBLE PARTY	REPORTING PARTY
NAME		Scott Tingelhoff	Scott Tingelhoff
POSITION TITLE			
BUSINESS NAME	AltEn LLC	AltEn LLC	AltEn LLC
STREET OR PO BOX	1344 County Road 10	1344 County Road 10	1344 County Road 10
ADDRESS LINE 2			
CITY - STATE - ZIP	Mead NE 68041-4036	Mead NE 68041	Mead NE 68041
E-MAIL ADDRESS		stingelhoff@mrgkc.com	stingelhoff@mrgkc.com
WORK PHONE			
CELL PHONE		(402) 443-6262	(402) 443-6262
HOME PHONE			

COUNTY Saunders	DIRECTIONS From Airport, Hwy 92/77(Rd M)-3E, Rd 13-0.75S, W Side
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QUARTER N½, SW¼	SECTION 12	TOWNSHIP N 14	RANGE E 8	MARKER	MILE	ROAD NAME	LATITUDE 41.19714	LONGITUDE -96.48081
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LAKE ID	LAKE	RIVER BASIN (LAKE)
STREAM ID	STREAM	RIVER BASIN (STREAM)
HUC	HYDROLOGIC UNIT NAME	SUBDIVISION

OBSERVATIONS

WHAT IS THE PROBLEM?

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 3 years old. Cold temps 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?

Four million gallon digester at SE corner of property

DESCRIBE ANY APPARENT PATTERNS OVER TIME

FIRST OBSERVED	LAST OBSERVED	ONGOING SITUATION	HOW LONG	OCCURRING NOW	RESPONSE TIMEFRAME
02-12-2021 12:30 AM		Yes		Yes	

AIR IMPACTED	LAND IMPACTED	WATER IMPACTED	SPILL OR RELEASE	FISH KILL	EVIDENCE OF ENVIRONMENTAL DAMAGE
	Yes		Yes		Yes

EVIDENCE OF ENVIRONMENTAL DAMAGE - EXPLANATION

Thin stillage (possibly tainted with pesticides) and manure in road ditch

OTHER PERTINENT DETAILS

Mr. Tingelhoff called NSP about 0300 hours this morning at (402) 471-4545 (old spill reporting #) 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 ans. machine but did not wait for after-hours #.

WHO ELSE DID THE REPORTING PARTY CONTACT ABOUT THIS PROBLEM?

NRC Report #1297838

NDEQ PROGRAM REFERRALS

LEAD	PROGRAM ISSUE	PROG	PROGRAM ID	DATE CLOSED	REASON CLOSED	FIELD OFFICE
	Release	RA				
	Release of Pesticides	GW				
	Dumping in Ditch	SW				

(1 more)

OTHER AGENCIES NOTIFIED

DATE	AGENCY	DIVISION	PROGRAM	REFERENCE #

**Notification of Environmental Concern
Spill or Release**

SOURCE OF RELEASE

SOURCE MOBILITY Stationary	TRANSPORT MODE	PROPERTY USE HazMat Chemical Manufacturing	RELEASE FACTORS Mechanical Failure
EXTENT OF RELEASE Confined to Property Use of Origin		HAZMAT ID SOURCE Discharger	CONTINUOUS RELEASE DAYS PER YEAR

RELEASE RESPONSE

<input type="checkbox"/> CONTAIN RELEASE	<input type="checkbox"/> ESTABLISH SAFE AREA	<input type="checkbox"/> NO ACTION	<input type="checkbox"/> REMOVE HAZARD
<input type="checkbox"/> CONTROL CROWD	<input type="checkbox"/> EVACUATE AREA	<input type="checkbox"/> OTHER	<input type="checkbox"/> RESCUE, REMOVE FROM HARM
<input type="checkbox"/> CONTROL TRAFFIC	<input type="checkbox"/> IDENTIFY / ANALYZE HAZMAT	<input type="checkbox"/> PROVIDE EMERGENCY MEDICAL SERVICES	<input type="checkbox"/> SEARCH
<input type="checkbox"/> DECONTAMINATE AREA	<input type="checkbox"/> INVESTIGATE	<input type="checkbox"/> PROVIDE PUBLIC INFORMATION	<input type="checkbox"/> SECURE PROPERTY
<input type="checkbox"/> DILUTE / NEUTRALIZE	<input type="checkbox"/> MONITOR	<input type="checkbox"/> REFER TO PROPER AUTHORITY	<input checked="" type="checkbox"/> SHUT DOWN SYSTEM
<input type="checkbox"/> DIVERT RELEASE	<input type="checkbox"/> NDEQ ON SCENE RESPONSE		

MATERIAL RELEASED

QUANTITY RELEASED	MATERIAL NAME Thin stillage w/ pesticides and manure	MATERIAL GROUP Animal Products	MATERIAL CATEGORY Other
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CAS NUMBER	GAS	LIQUID	SOLID	CONTAINER TYPE Tank	CONTAINER MATERIAL	CONSTRUCTION
		X				

QUANTITY RELEASED	MATERIAL NAME	MATERIAL GROUP	MATERIAL CATEGORY
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CAS NUMBER	GAS	LIQUID	SOLID	CONTAINER TYPE	CONTAINER MATERIAL	CONSTRUCTION
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QUANTITY RELEASED	MATERIAL NAME	MATERIAL GROUP	MATERIAL CATEGORY
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CAS NUMBER	GAS	LIQUID	SOLID	CONTAINER TYPE	CONTAINER MATERIAL	CONSTRUCTION
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ATTACHMENT B

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@mrqkc.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



AltEn LLC February 12, 2021 Observation Points Map 2



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



Attachment 3

NEBRASKA

DEPT. OF ENVIRONMENT AND ENERGY

Inspection and Assistance Exit Summary

NDEE ID _____ NDEE Program & ID _____ NDEE Notification # _____
 Inspection/Other Compliance Assistance Visit (CAV) Permit Assistance Visit (PAV)
Facility/Operation Name _____
Address _____
City/Town _____ County _____ State of Nebraska _____
Owner/Operator/Operator Inspection Contact(s) _____
Ins: _____ Phone No _____ E-Mail address _____
_____ @NEBRASKA.GOV
_____ @NEBRASKA.GOV
Mailing Address: Department of Environment and Energy, PO Box 98022, Lincoln, Nebraska 68509-8922

Inspection Date: _____ Start Time: _____ End Time: _____
 No concerns observed Further agency discussion needed to determine compliance
 Concerns observed

Actions to be performed immediately or as soon as reasonably practical

Please notify the inspector when the above actions are completed.
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 _____ Please contact the inspector if you have any questions concerning this inspection and assistance exit summary.

Inspector Signature _____ Inspection Contact Signature _____
revised 11/10/10

ATTACHMENT C

NEBRASKA

Good Life. Great Resources.

DEPT. OF ENVIRONMENT AND ENERGY



Pete Ricketts, Governor

Return Receipt Requested

FEB 17 2021

Scott Tingelhoff, General Manager
AltEn, LLC
Capital Corporate Services, Inc.
1125 South 103rd Street
Suite 800
Omaha, NE 68124

RE: AltEn, LLC
NDEE ID: 84069
Program ID: 021221-NH-0845
Letter of Noncompliance

Dear Mr. Tingelhoff,

On Feb. 12, you reported a discharge of thin stillage and digester wastes from a 4-million gallon tank located on the AltEn property near Mead, Nebraska resulting from a broken pipe. These wastes were discharged to a road ditch and traveled off the AltEn property to neighboring property and waters of the State in violation of Neb. Rev. Stat. § 81-1506(1) which makes it unlawful to cause pollution of any air, waters, or land of the state or to place or cause to be placed any wastes in a location where they are likely to cause pollution of any air, waters, or land of the state. NDEE inspectors observed and documented the uncontrolled discharge.

The Department has determined that the following mitigating action must be taken to correct these violations. You are required to complete the following tasks and provide written confirmation of completion to me by the date indicated. Mitigation must include:

1. Immediately:

- A. Take action to prevent further migration of the digester material. Construct and maintain secure barriers to prevent further migration of digester material downstream. The final barrier ("Furthest extent of spill observed", see enclosed) will be located directly below the farthest downstream migrated material location. Monitor existing and constructed barriers daily for integrity and effectiveness.

20210010706

- B. Take action to construct and maintain secure barriers to prevent migration of digester material from AltEn, LLC property.
- C. Take action to construct secondary containment for the second digester. Conduct and document hourly inspections of the digester for leaks or potential failure. Take action to correct leaks or potential failure upon discovery.
- D. Take action to prevent the comingling of snow melt with digester material. Clear accumulated snow and new snowfall away from digester material. Locate the snow where melt water will not comingling with released material. Snow contaminated or in contact with released material is considered part of the release.

2. By 12:00 p.m., February 18, 2021:

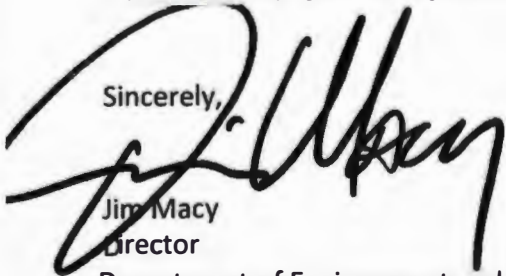
- A. Provide a written plan describing the recovery and transportation of released digester material. Identify the method and location of disposal for this material. Include the start date of activity and a daily schedule of implementation.
- B. Provide a plan to prevent a discharge from the second digester. Describe the recovery and disposal of material discharged to the containment. Describe the planned action to contain and recover a discharge breaching the containment.

Notify the Department directly upon each completion of requests 1.A – 1.D. Provide the documentation requested in 2.A and 2.B to the Department at:

Brad Pracheil
Division Administrator for Inspection and Compliance
Department of Environment and Energy
245 Fallbrook Boulevard
Lincoln, NE 68509-8922
Brad.Pracheil@nebraska.gov

These violations are High Priority Violations and your immediate action is required. Further remedial action may be required and enforcement action may be considered including cost recovery.

If you have any questions, please contact Brad Pracheil at (402)-471-4141.

Sincerely,

Jim Macy
Director
Department of Environment and Energy



ATTACHMENT D

84069
PCS NEK 001153

INVESTIGATION REPORT

NDEE Investigator: Neal Heil, Mark Pomajzl

Through: Kirk Morrow

Report Date: 2/16/2021

Investigation Date: 02/13/2021

Re: AltEn LLC-Mead

NDEE ID: 84069

Program ID: RA 021221-NH-0845

Topic: Release of Thin Stillage and Manure from Digester

REPRESENTATIVES ON SITE

Name	Representing	Phone Number
Neal Heil	NDEE	402-471-3093
Mark Pomajzl	NDEE	402-471-2936
Dean Egr	AltEn LLC	

INVESTIGATION PURPOSE

AltEn contacted NDEE to report a release of thin stillage and cattle manure from a four million gallon capacity digester at the AltEn Mead facility. NDEE representatives Mark Pomajzl and Neal Heil were directed to respond to the facility on February 13th to observe site conditions and response actions taken by the facility.

DIRECTIONS TO LOCATION

1344 County Road 10, Mead, Nebraska
GPS Coordinates: 41.19714, -96.48081

INVESTIGATION NARRATIVE

Narrative by Neal Heil.

Mark and I arrived at the AltEn administrative office parking lot at about 1000 hours. Mark attempted to announce our arrival at the administrative office, but the office, although unlocked, was unstaffed. Mark and I proceeded to the location of the spill; presuming AltEn staff would be present at that location. There were no AltEn staff at the location of the digester where the spill occurred. Mark and I observed some brown-colored liquid flowing down the slope from the digester to the ditch north of the east/west road running between Mead Cattle Company and the AltEn facility (see attached photos). Mark, who had been on-site Friday, said the flow of liquid was considerably slower than it had been on Friday. I estimated the current flow of liquid to be about 10 gallons per minute. Mark said there had been pumping equipment at the location on Friday; presumably pumping the spilled liquid to the facility lagoon. There was no pumping equipment at the location at this time.

Mark and I drove east to a tee intersection at/adjacent to the Mead Cattle Company. Mark said the area had been inundated with liquid spilled from the digester during his visit on Friday. Mark said pumping equipment had been present at this location on Friday, however, none was present at this time. Fresh snowfall made it difficult to discern areas now covered with liquid spilled from the digester, but, Mark said it appeared that the liquid levels were lower compared to yesterday.

Mark and I proceeded to the area depicted as culvert A on the attached Google Earth image. We encountered two AltEn staff, including Mr. Egr, in a pickup truck at that location. Mr. Egr informed us that AltEn was attempting to seal an improvised dam, constructed on Friday, with earth. The dam, built on the upstream side of a culvert under the roadway, appeared to be built with plastic

PETROLEUM REMEDIATION SECTION

20210007029

sheeting, large round hay bales, concrete rip-rap, and earth. Mr. Egr said a contractor was en route from Kansas with pumps/piping that would capture and transmit the spilled liquid from upstream of this dam back to the AltEn lagoon. Significant flow of liquid was apparent on the downstream side of the culvert. A payloader arrived a short while later with a load of dirt and placed the dirt on the dam. We asked Mr. Egr if the digester that had leaked liquid was empty. Mr. Egr estimated only about 1 foot of liquid remained in the digester. We asked Mr. Egr if the second digester (similar in capacity to the one that suffered a release) contained liquid. Mr. Egr said it did. We asked what, if any, precautions had AltEn taken to protect the piping on the second digester at the facility from suffering a similar release. Mr. Egr said insulation had been placed over the subgrade vault where the vulnerable piping is located. Mr. Egr said a heat lamp had been placed in the vault under the insulation to prevent freezing of the piping. Mark informed Mr. Egr of our plan to inspect the spill area and provided to him an Inspection and Assistance Exit Summary (copy attached).

Mark and I proceeded to the next downstream location, depicted as culvert B on the attached Google Earth image, where the ditch intersected with a roadway. We observed liquid flowing through the culvert (see attached photos). Based upon the cold temperatures that we presume would have frozen any pre-existing water and the odor associated with the flowing liquid we observed, that the flowing liquid was likely what had spilled from the digester.

Mark and I proceeded to the location depicted as culvert C on the attached Google Earth image. We observed liquid flowing through the culvert (see attached photos). We proceeded to the location depicted as culvert D on the attached Google Earth image. We observed an inch or two of liquid on top of existing ice and within the snow cover (see attached photos). There was no obvious flow of this liquid. The liquid did exhibit an odor similar to the liquid spilled from the digester.

It was not obvious from the aerial image we had with us if the ditch continued only south, or if it branched and flowed east under county road 7. County road 7 south of H road is a minimum maintenance road and had not been plowed of snow. Mark and I walked about $\frac{1}{2}$ to $\frac{3}{4}$ mile south on county road 7 and determined that the ditch did now flow under/near county road 7. We returned to the vehicles and drove to where the ditch flowed through a culvert under county road G (culvert E on the attached Google Earth image). We scraped the snow down to the ice below at the upstream end of culvert E and did not observe any liquid. We presumed this to mean the spill had not flowed as far as culvert E.

We returned to the AltEn facility to examine the digester that had not suffered a release. We observed a pile of Styrofoam insulation panels we presumed were covering the piping vault (see attached photo). We observed electrical wiring leading under the pile of insulation and presumed that to be for the heat lamp mentioned by Mr. Egr. We observed on the south side of the digester that had not suffered a leak a column of ice surrounded by caution tape (see attached photo). We could see a fitting above the column of ice actively releasing a liquid (which appeared to be freezing and creating the column of ice). We presumed this liquid was thin stillage and manure being released from the full or nearly full digester.

I called NDEE representative Kirk Morrow at about 1315 hours and provided to him a brief summary of our observations. Mark and I agreed I would call AltEn representative Scott Tinglehoff and discuss our findings with him. Mr. Tinglehoff did not answer at the number he had provided to me and his voice mailbox was full; preventing me from leaving a voice message for him.

Mark and I left the site at about 1340 hours to return to Lincoln.

CONCLUSIONS

A digester containing thin stillage and cattle manure suffered a catastrophic failure due to a pipe connected to the floor of the digester bursting; reportedly due to freezing weather. An estimated

four million gallons of liquid was released to the land surface. The spilled liquid flowed into a ditch and travelled approximately three miles from the source at the time of our response. A dam constructed some time Friday, was ineffective at stopping the flow of spilled liquid. It is not known if the lack of effectiveness of the dam was due to poor construction or failure of the dam due to build-up of hydrostatic pressure.

PENDING ACTIONS

NDEE will determine if additional remedial actions are warranted for this release incident.

ATTACHMENTS

- | | |
|---|---|
| <input type="checkbox"/> Topographic Map | <input type="checkbox"/> Sampling Receipt |
| <input checked="" type="checkbox"/> Aerial Photograph | <input type="checkbox"/> Laboratory Analytical Results |
| <input type="checkbox"/> Site Map | <input checked="" type="checkbox"/> Photographs |
| <input type="checkbox"/> Figures | <input checked="" type="checkbox"/> Other: NDEE Inspection and Assistance |
| <input type="checkbox"/> Chain of Custody | Exit Summary |

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View north of piping vault where leak occurred



View north of digester where leak occurred

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View east from near digester toward road ditch



View west of road ditch with digester in background

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View NE of ditch near Mead Cattle Company



View WNW of dam upstream of culvert A

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View east of ditch downstream from culvert A



View north of ditch upstream from culvert B

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View south of ditch downstream of culvert B



View north of ditch upstream from culvert C

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View south of ditch downstream from culvert C



View north of ditch upstream from culvert D

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



Insulation over piping vault on digester without leak



Spilling and leaking liquid from digester without leak



Digester

Culvert A

Culvert B

Culvert C

Culvert D

Min. Maint. Road

Culvert E (no spill observed)

10

J

6

7

Yutan-Rd

Ave-A

© 2021 Google

Goog

Imagery Date: 6/4/2018 lat 41.170135° lon 96.445190° elev 1164 ft

NEBRASKA

DEPT. OF ENVIRONMENT AND ENERGY

Inspection and Assistance Exit Summary

NDEE ID: 84069 NDEE Program & ID: _____ NDEE Notification #: _____

Inspection/Other Compliance Assistance Visit (CAV) Permit Assistance Visit (PAV)

Facility/Operation Name: _____

Address: _____

City/Town: _____, County: _____, State of Nebraska.

Owner/Occupant/Operator Inspection Contact(s): _____

Inspector	Phone No	E-Mail address
<u>Steve Papp</u>	<u>402-471-2121</u>	<u>Steve.Papp@nebraska.gov</u>
		<u>@nebraska.gov</u>

Mailing Address: Department of Environment and Energy, PO Box 98922, Lincoln, Nebraska 68509-8922

Inspection Date: 2-13-21 Start Time: _____ End Time: 11:00 AM

- No concerns observed Further agency discussion needed to determine compliance
- Concerns observed:

x 1. During the inspection, the inspector observed that the facility is not in compliance with the following requirements:

1. The facility is not in compliance with the following requirements:

2. The facility is not in compliance with the following requirements:

3. The facility is not in compliance with the following requirements:

4. The facility is not in compliance with the following requirements:

Actions to be performed immediately or as soon as reasonably practical:

1. The facility is not in compliance with the following requirements:

2. The facility is not in compliance with the following requirements:

3. The facility is not in compliance with the following requirements:

4. The facility is not in compliance with the following requirements:

Please notify the Inspector when the above actions are completed.

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: Steve Papp. Please contact the Inspector if you have any questions concerning this inspection and assistance exit summary.

Signing this document is not an admission of liability by the facility.

Inspector Signature _____

Inspection Contact Signature _____

84069

PLS NER 001153

INVESTIGATION REPORT

NDEE Investigator: Neal Heil *NH*

Through: _____

Report Date: 2/17/2021

Investigation Date: 2/17/2021

Re: AltEn LLC-Mead

NDEE ID: 84069

Program ID: RA 021221-NH-0845

Topic: Release of Thin Stillage and Manure from Digester

PETROLEUM REMEDIATION SECTION

REPRESENTATIVES ON SITE

Name	Representing	Phone Number
Neal Heil	NDEE	402-471-3093
Ken Peterson	AltEn LLC	605-354-0631

INVESTIGATION PURPOSE

AltEn contacted NDEE to report a release of thin stillage and cattle manure from a four million gallon capacity digester at the AltEn Mead facility. NDEE developed a plan to maintain situational awareness of the incident by having NDEE representatives visit six pre-determined locations at least once daily. Neal Heil was directed to perform the first of these daily events.

DIRECTIONS TO LOCATION

1344 County Road 10, Mead, Nebraska
GPS Coordinates: 41.19714, -96.48081

INVESTIGATION NARRATIVE

NDEE representative Kirk Morrow had provided to me a map with six pre-determined locations I was to visit (see attached Google Earth images with locations). I arrived at Stop #1 at about 1449 hours. Stop #1 is along a paved road just east of the Ashland Gun Club. I did not observe any obvious evidence such as free-flowing liquid, brown-colored ice, melted snow, or odor that would suggest the material spilled from the digester at AltEn had reached this location (see attached photo).

I proceeded to Stop #2. Stop #2 is located a short distance north of the intersection of road 6 and road F. I did not see any evidence that the spilled material had reached this location (see attached photos). All liquid in the ditch appeared frozen and there was no flow through the culvert.

I proceeded to Stop #3. Stop #3 is located on road 7 about 1/2 mile north of road F. The surface of the liquid in the ditch at Stop #3 was frozen. I did not attempt to break through the ice to determine if there was unfrozen liquid below the ice. The ice had slight yellow/tan coloration. I observed plywood (or similar) wrapped with a tarp covering the inlet of the culvert. There were several sandbags placed at the base of the plywood/tarp to hold it in place (see attached photos). I dug through the snow at the downstream outlet of the culvert and found only ice. I did not attempt to break through the ice at the culvert outlet to look for unfrozen liquid.

I proceeded to Stop #4. Stop #4 is located on road 8 about 1/2 mile north of road H. I observed brown-colored ice both upstream and downstream from Stop #4. Upstream from Stop #4, the ice was broken in many pieces as if it froze and the liquid below drained away (see attached photos).

I proceeded to Stop #5. Stop #5 is located on a closed road (road 9) a short distance north of road J. I observed an earthen dam upstream from Stop #5. I did not see the hay bales or concrete rip-

20210007026

rap I had observed at this location on February 13th. It is unknown if the bales and concrete were removed, or simply covered with earth. The volume of earth present was significantly greater than the volume of earth I had observed on the 13th. I observed brown ice both upstream and downstream of Stop #5. I made no attempt to break through the ice to determine if flowing liquid was present below the ice. I observed flexible piping laid out near Stop #5 and extending some distance to the north (see attached photos).

I called Scott Tingelhoff at about 1552 hours at the cell phone number he had provided to me. No one answered the phone and the voice mailbox was full.

I proceeded to the AltEn administrative office to request permission to visit Stop #6; the AltEn digester which had not suffered a release. Mr. Ken Peterson, Plant Manager, greeted me at the office and accompanied me to the digester. I did not attempt to view the digester that had already suffered a release as it is my understanding the complete contents of the digester had already been lost. I only viewed the digester that had not yet suffered a release. I saw no evidence of a release from this digester. Mr. Peterson showed me the insulation placed over the piping vault on this digester. Mr. Peterson said a trouble light with a 75 watt bulb was placed in the vault below the insulation to provide warmth to the piping. Mr. Peterson said AltEn employees inspect the digester hourly to ensure no leak occurs.

I left the site at about 1620 hours to return to Lincoln

CONCLUSIONS

A digester containing thin stillage and cattle manure suffered a catastrophic failure due to a pipe connected to the floor of the digester bursting; reportedly due to freezing weather. An estimated four million gallons of liquid was released to the land surface. The spilled liquid flowed into a ditch and travelled some distance from the source. Extremely cold temperatures since the date of the release appears to have frozen some/much of the spilled material.

PENDING ACTIONS

NDEE will determine if additional remedial actions are warranted for this release incident.

ATTACHMENTS

- | | |
|---|--|
| <input type="checkbox"/> Topographic Map | <input type="checkbox"/> Sampling Receipt |
| <input checked="" type="checkbox"/> Aerial Photograph | <input type="checkbox"/> Laboratory Analytical Results |
| <input type="checkbox"/> Site Map | <input checked="" type="checkbox"/> Photographs |
| <input type="checkbox"/> Figures | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Chain of Custody | |



Admin Office
Stop 6

Stop 5

Stop 4

Stop 3

Stop 2

Wann

Memphis

Stop 1
Wilburn Island

© 2021 Google

Go

Imagery Date: 6/4/2018 | lat 41.147074° lon -96.400528° elev 1113 ft



©2021 Google

Go

Imagery Date: 6/4/2018 lat 41.088837° lon -96.370009° elev 1069 ft



Stop 3

Stop 2

7

6

F

© 2021 Google

Goog

Imagery Date: 6/4/2018 lat 41.136603° lon -96.417905° elev 1139 ft



Stop 5

9

8th St

7

Stop 4

8

9th St

© 2021 Google

Go

Imagery Date: 6/4/2018 lat 41.175746° lon -96.448379° elev 1173 ft



© 2021 Google

Go

Imagery Date: 6/4/2018 lat 41.196144° lon -96.479899° elev 1199 ft

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View north of ditch upstream from Stop #1



View west of ditch upstream from Stop #2

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View east of ditch downstream from Stop #2



View east of upstream culvert inlet at Stop #2

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View west of ditch upstream from Stop #3



Containment structure in culvert inlet at Stop #3

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View east of ditch downstream from Stop #3



View west of ditch upstream from Stop #4

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



Broken crust of ice at culvert inlet at Stop #4



View east of ditch downstream from Stop #4

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View west of dam upstream of Stop #5



View east of ditch downstream from Stop #5

Release of Thin Stillage and Cattle Manure from Digester at AltEn LLC, IIS #84069, RA
#021221-NH-0845



View north of piping laid out at Stop #5



Insulation over piping well on digester w/out leak

DATE: 2/18/21

INVESTIGATOR: Greg Michl

WEATHER: Clear skies and cold

**STOP 1 – HIGHWAY 66 WEST of
ASHLAND GUN CLUB**

Time: 0900

Clear Creek at this location was 99% ice/snow covered. There was a couple of open water areas, but site is currently not impacted from the AltEn LLC thin stillage discharge. Photo is looking north (upstream).



**STOP 2 – North of the Intersection of
COUNTY ROADS 6 & F**

Time: 0920

I found no evidence of the AltEn LLC thin stillage discharge reaching this location. I chopped a hole in the ice (~10 inches thick) to the channel's substrate. It was completely frozen, with no water below the ice. Photos were taken looking west/northwest (upstream).



20210025451

STOP 3 – Road 7/Highway 66

Time: 0930

I found no evidence of the AltEn LLC thin stillage discharge reaching this location. I chopped a hole in the ice (~12 inches thick) to the channel's substrate. It was completely frozen, with no water below the ice. Photos were taken looking west/northwest (upstream).

The berm/dam located here made up of a tarp and sand bags appears to have constructed on top of the channel's ice surface in front the culvert. It would seem prudent to chip the ice away and lower the entire structure.



STOP 4 – County Road 8, North of Road H

Time: 0945

The AltEn LLC thin stillage discharge water remains as a frozen layer on top of the original ice layer that existed prior to the thin stillage release. The frozen waste water ice is much darker in appearance than the snow and original ice in the channel. The darker, frozen top layer was easily broken by walking on it. I did chop a hole through the channel's original ice layer (~12 inches thick) and found water underneath at this location. I do not believe the water to be the thin stillage waste, as there was no pressure from below that filled the hole I had opened. However, I did not have a meter with me to confirm to be true.



STOP 5 – UN-L Eastern Extension – North of County Roads 9 & J

Time: 0955

The AltEn LLC thin stillage discharge water remains as a large pooled area behind the make-shift dam constructed on the upstream (west) side at this location. Ken Peterson (AltEn Plant Manager) showed up while I was at this location. He told me they had placed additional earthen material here to stop the seepage through the culverts. He also said they planned to start pumping the liquid from this location back into a lagoon yet today. A hose was stretched out in this area, but no pump was in place when I was there.



STOP 6 – ALTEN LLC FACILITY DIGESTERS

Time: 1010

Ken Peterson (AltEn Plant Manager) led me to the digesters and gave me a quick tour. I did not observe any discharges from either the north or south stillage tank. The top photo is the covered pipe/valve housing on the north tank and the bottom photo is of the one that failed on the south tank.



ADDITIONAL INFORMATION / COMMENTS:

Ken Peterson (AltEn Plant Manager) did tell me they were in the process of constructing an additional berm/dam on the affected channel approximately ½ mile south of the “Stop #5”.

ALTEN SITUATIONAL AWARENESS (FEB 2021)



- DAILY TRIPS (One Person) - This could be twice per day as things warm up.
- 6 Stops
- Visual Observations recorded
- Immediate Notification/Action if changes are observed.
 - Sampling
 - Initiate a Response Contractor
- Record observations on a custom/standard form.

STOP 1 – HIGHWAY 66 West of ASHLAND GUN CLUB

There should be no observable contamination.

STOP 2 – North of the Intersection of County Road 6 & F

There should be no observable contamination.

STOP 3 – ROAD 7/Highway 66

You should see an intact containment structure and no contaminants getting past.

STOP 4 – COUNTY ROAD 8, North of Road H

There will be abundant contaminants confined to the channel.

STOP 5 – UN-L Eastern Extension – County Roads 9 & J

There will be remnants of a containments structure that failed and contaminants.

STOP 6 – ALTEN LLC Facility Digesters

Call facility (KEN PETERSON – 607-735-1111) prior to entry, check in at office if required, proceed to the digesters. HARD HAT and Safety Glasses – We need to confirm efforts to prevent a second release from this area.

Morrow, Kirk

From: Morrow, Kirk
Sent: Friday, February 19, 2021 2:58 PM
To: Scott Tingelhoff
Cc: kpeterson@mrgkc.com; dzalesky2@unl.edu; mtingelhoff@mrgkc.com; Doug Ferguson (Ferguson.Doug@epamail.epa.gov); Buell, Thomas; Pracheil, Brad
Subject: RE: DAILY OBSERVATIONS (FEB 19)
Attachments: ALTEN OBSERVATIONS (Borovich 19FEB).pdf

RE: ALT EN LLC
MEAD, NEBRASKA

NDEE FAC ID: 84069

PROGRAM ID: 021221-NH-0845

Mr. Tingelhoff:

For your use and information.

Attached is my group's observations from earlier today.

Sincerely,

Kirk Morrow, P.G.
Emergency Response Program
Nebraska Dept. of Environment & Energy
P.O. Box 98922
Lincoln, NE 68509-8922
[http //dee ne gov](http://dee.ne.gov)

20210025470

DATE: February 19, 2021

INVESTIGATOR: Jim Borovich

WEATHER: Sunny, cold (16 degrees), no wind

**STOP 1 – HIGHWAY 66 WEST of
ASHLAND GUN CLUB – 0835 hrs.**

Nothing to see here other than water and ice;
no apparent impacts.

Photo looking north from Highway 66 bridge.



**STOP 2 – North of the Intersection of
COUNTY ROADS 6 & F – 0845 hrs.**

No apparent contamination; same as
described by Greg Michl 2-18-21.

Photo looking west.



STOP 3 – Road 7/Highway 66 – 0850 hrs.

Same as reported by Greg Michl 2/18/21, no contamination apparent.

Top photo looking west.

Bottom photo looking east at containment structure.

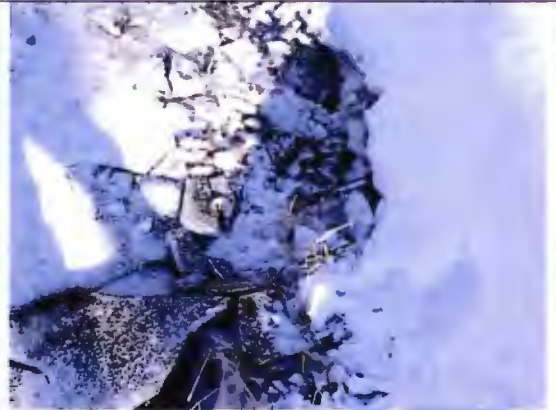


**STOP 4 – County Road 8, North of Road H
– 0905 hrs.**

Appears to be as described by Greg Michl on 2-18-21. Contamination evident.

Top two photos looking down at frozen contamination on west side of county road.

Bottom photo looking east from east side of county road.



STOP 5 – UN-L Eastern Extension – North of County Roads 9 & J – 0915 hrs.

Generator and piping present, but no pumping going on.

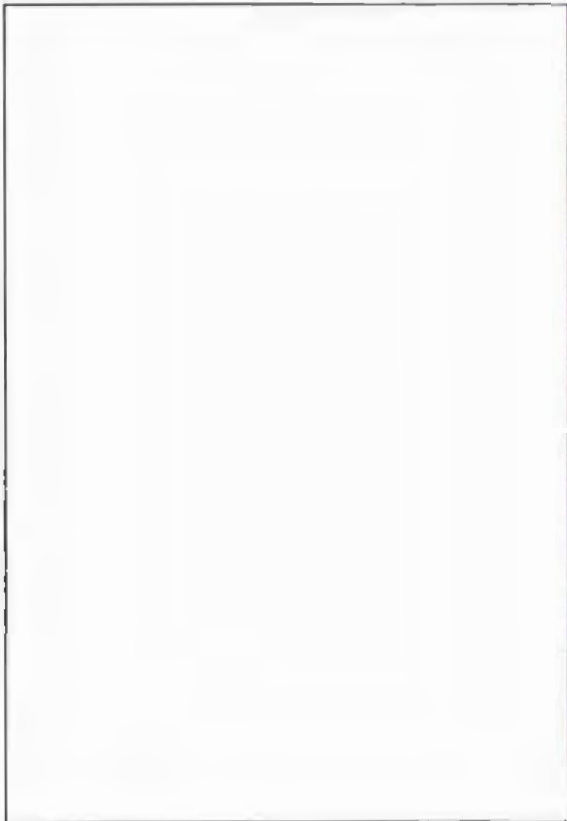
Top photo (page 4) looking west at constructed dam.

Bottom photo (page 4). Looking down from top of constructed dam.

Top photo (page 5). Looking east at frozen contamination.

Bottom photo (page 5). Looking north at overview of generator (not operating) and piping.



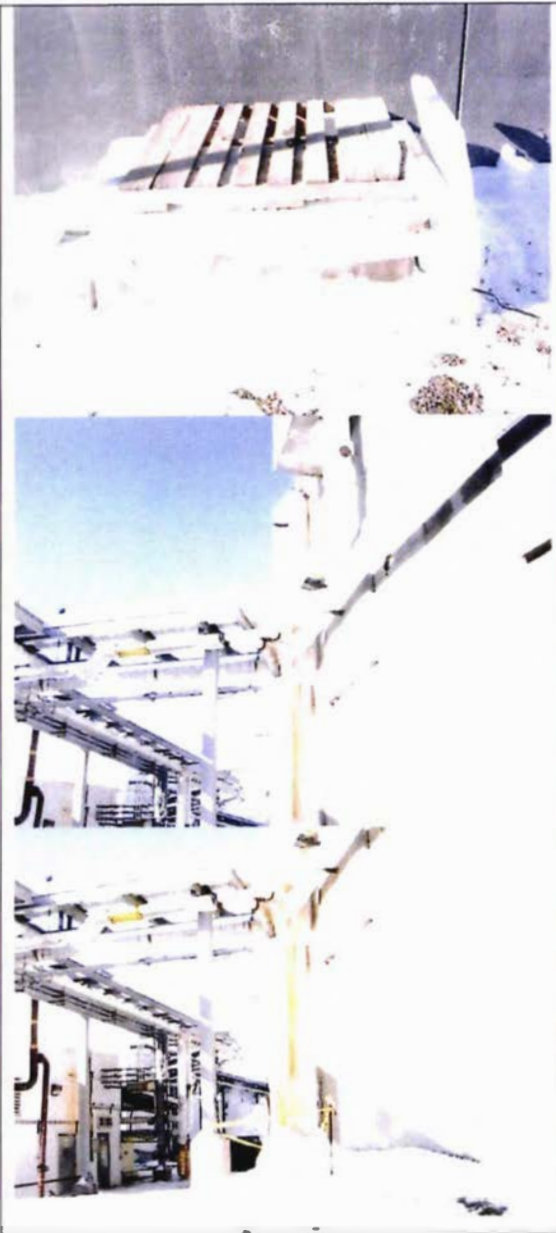


**STOP 6 – ALTEN LLC FACILITY
DIGESTERS – 0932 hrs.**

Same observed by Greg Michl 2-18-21.

Top photo. Looking at piping well associated with north digester. Chord on right side leading into well is associated with heating lamp for piping.

Bottom two photos. Looking at ice accumulation on side of north digester.

**ADDITIONAL INFORMATION / COMMENTS:**

Facility pumping water from emergency lagoon to active wastewater lagoons in preparation for pumping material from north digester. NDEE Inspector Hillary Stoll on-site for inspection of emergency lagoon (see Photos below). Top photo looking east across "emergency lagoon." Bottom photo (looking south) shows water from "emergency lagoon" being pumped north to site wastewater lagoons.



ALTEN SITUATIONAL AWARENESS (FEB 2021)



- DAILY TRIPS (One Person) - This could be twice per day as things warm up.
- 6 Stops
- Visual Observations recorded
- Immediate Notification/Action if changes are observed.
 - Sampling
 - Initiate a Response Contractor
- Record observations on a custom/standard form.

STOP 1 – HIGHWAY 66 West of ASHLAND GUN CLUB

There should be no observable contamination.

STOP 2 – North of the Intersection of County Road 6 & F

There should be no observable contamination.

STOP 3 – ROAD 7/Highway 66

You should see an intact containment structure and no contaminants getting past.

STOP 4 – COUNTY ROAD 8, North of Road H

There will be abundant contaminants confined to the channel.

STOP 5 – UN-L Eastern Extension – County Roads 9 & J

There will be remnants of a containments structure that failed and contaminants.

STOP 6 – ALTEN LLC Facility Digesters

Call facility (KEN PETERSON – 615-233-1111) prior to entry, check in at office if required, proceed to the digesters. HARD HAT and Safety Glasses – We need to confirm efforts to prevent a second release from this area.

Alt En - Mead
Facility 84069

Morrow, Kirk

From: Michl, Greg
Sent: Friday, February 19, 2021 1:14 PM
To: Morrow, Kirk
Subject: Fw: AltEn site visit 2/18/21

From: Jim Edwards <chrome.book.anon@gmail.com>
Sent: Friday, February 19, 2021 12:38 PM
To: Michl, Greg <greg.michl@nebraska.gov>
Subject: AltEn site visit 2/18/21

I read your site visit published on the NDEE website today.
I was also examining the spill yesterday and took the photograph below where AltEn's contractor was pumping the spillage from Johnson Creek back to the lagoon from the intersection of county roads 9 and J.

20210225469



ATTACHMENT E



AltEn, LLC
1344 County Road 10
Mead, NE 68041

February 18, 2021

Brad Pracheil
Division Administrator for Inspection and Compliance
Department of Environment and Energy
245 Fallbrook Boulevard
P.O. Box 98922
Lincoln, NE 68509-8922

RECEIVED

FEB 18 2021

NE Dept Of Environment and Energy
By: _____ DEE#158 _____

RE: AltEn, LLC
NDEE ID: 84069
Program ID: 021221-NH-0845

Dear Mr. Pracheil:

AltEn, LLC is in receipt of the letter which was hand delivered to the AltEn offices on February 17, 2021 regarding the discharge from the south digester on February 12, 2021.

On Feb. 12, AltEn reported a discharge from a 4-million gallon digester located on the AltEn property near Mead, Nebraska resulting from a frozen pipe. In response to the Department's determination regarding the mitigating actions to be taken, please see below.

1. Immediately:

- A. Take action to prevent further migration of the digester material. Construct and maintain secure barriers to prevent further migration of digester material downstream. The final barrier ("Furthest extent of spill observed", see enclosed) will be located directly below the farthest downstream migrated material location. Monitor existing and constructed barriers daily for integrity and effectiveness.

Two barriers were constructed on AltEn property to slow and contain as much of the release as possible on its property. A third barrier consisting of sand bags, plywood, and a tarp has been constructed closing off a culvert at a location as shown on the attached map. The third barrier was constructed at a location further downstream from where the furthest digester spill liquid had migrated. Additional intermediary barriers will be constructed between AltEn's property and the farthest downstream barrier location in order to assist with clean up. AltEn is monitoring the constructed barriers daily with visual inspections to assess their integrity and effectiveness.

- B. Take action to construct and maintain secure barriers to prevent migration of digester material from AltEn, LLC property.

20210016055

Two barriers were constructed on AltEn property to slow and contain as much of the release as possible on its property. An attached map depicts the location of the barriers. AltEn has requested the services of Clean Harbors to assist with the reinforcement of the barrier installation as well as to provide additional oversight on the cleanup and the prevention of migration of the digester material. Clean Harbors will be on-site in the afternoon of February 18, 2021.

- C. Take action to construct secondary containment for the second digester. Conduct and document hourly inspections of the digester for leaks or potential failure. Take action to correct leaks or potential failure upon discovery.

Due to the quantity of liquids in the second digester (4 million gallons), AltEn is not able to construct a secondary containment around the second (north) digester. AltEn is conducting and documenting hourly inspections of the second (north) digester looking for leaks and potential failures. AltEn would immediately take action to correct any leaks or potential failures upon discovery. Given the fact no secondary containment is able to be constructed, AltEn believes the most prudent and risk adverse course of action would be to drain the second (north) digester into its lagoon system in order to best protect the environment from any additional accidental leaks or spills and with NDEE's approval, would do so. With the plant shut down and thus no heat source for the digesters, the draining of the liquids from the digester will eliminate the risk of future freeze related pipe breaks and leaks from the digester.

- D. Take action to prevent the comingling of snow melt with digester material. Clear accumulated snow and new snowfall away from digester material. Locate the snow where melt water will not comingle with released material. Snow contaminated or in contact with released material is considered part of the release.

AltEn will attempt to minimize potential snow melt from comingling where possible and to complete the cleanup of the digester spill prior to any snow melt occurring. However, AltEn does not believe it can effectively prevent snow fall from accumulating and/or coming in contact with the digester material so it would be most prudent to complete the cleanup as soon as the weather permits.

2. By 12:00 p.m., February 18, 2021:

- A. Provide a written plan describing the recovery and transportation of released digester material. Identify the method and location of disposal for this material. Include the start date of activity and a daily schedule of implementation.

AltEn utilized multiple pumps and hoses it had access to on February 12, 2021 in order to recover and pump as much of the spill as possible into their emergency 6 million gallon lagoon. In addition, it had contacted Lagoon Pumping and Dredging, Inc. based in Columbus, Nebraska to assist with their cleanup efforts. Lagoon Pumping and Dredging, Inc. sent two employees to assist with the spill on February 12, 2021. Additional pumps and hoses have been located and delivered to the site. Brian Jakub

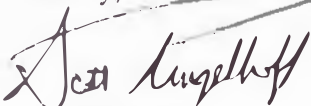
from Lagoon Pumping and Dredging, Inc. has been in daily contact with multiple employees of AltEn in order to discuss and implement the best and most timely recovery plan possible. Weather permitting, AltEn will begin pumping the contained digester material on Thursday, February 18, 2021. As previously discussed with Brad Pracheil and as developed over multiple discussions with Doug Ferguson (USEPA), AltEn is planning on working from barricade to barricade, starting at the location closest to the spill location and working downstream farther away, pumping the spilled digester material back into its lagoon system. Once each location is pumped as completely as possible, AltEn will introduce additional clean water into the ditch in order to flush and clean out any potential residue that remains. That water will also be pumped back to AltEn's lagoon system.

- B. Provide a plan to prevent a discharge from the second digester. Describe the recovery and disposal of material discharged to the containment. Describe the planned action to contain and recover a discharge breaching the containment.

AltEn added additional insulation along with an external heat source around the pipe on the second (north) digester. If material from the second (north) digester were to be discharged, efforts similar to what was performed with the first (south) digester spill would be made to contain the spill on AltEn's property. Given the fact no secondary containment is able to be constructed, AltEn believes it should drain the second (north) digester into its lagoon system in order to best protect the environment from any additional accidental leaks or spills and with NDEE's approval, would do so. With the plant shut down and thus no heat source for the digesters, the draining of the liquids from the digester will eliminate the risk of future freeze related pipe breaks and leaks from the digester.

If any additional information is needed, please do not hesitate to contact me at 402-624-0900 or stingelhoff@mrgkc.com.

Sincerely,



Scott Tingelhoff
General Manager



Barricade 1: On AltEn property

Barricade 2: On AltEn property

Barricade 3: On University of Nebraska Property – digester spill has not reached this location

NEBRASKA

Good Life. Great Resources.

DEPT. OF ENVIRONMENT AND ENERGY



February 18, 2021

Scott Tingelhoff, General Manager
AltEn, LLC
Capital Corporate Services, Inc.
1125 South 103rd Street
Suite 800
Omaha, NE 68124

RE: AltEn, LLC
NDEE ID: 84069
Program ID: 021221-NH-0845

Dear Mr. Tingelhoff:

NDEE has reviewed your letter and plan submitted today, February 18, 2021, and provides the following recommendations. The focus should be getting the waste materials out of the ditch before weather adversely impacts cleanup. While we acknowledge the potential threat from the second digester, we want to make sure the priority is cleanup of the current discharge first as conditions warrant. Specifically,

- Ensure all constructed barriers are fortified to contain wastes and prevent further migration of wastes downstream beyond what has already occurred while cleanup is continuing.
- To the extent practicable, use the emergency lagoon first for receiving pumped wastes.
- Minimize the amount of flush water used to avoid creating further problems in the receiving lagoons.
- To prevent further migration of the wastes past barricade 3, begin pumping from both ends of the discharge impact zones.
- Consider scraping wastes and impacted materials from impacted areas and employ erosion control best management practices and, if necessary, apply for a construction stormwater permit which can be done online.
<http://dee.ne.gov/Publications/pages/WAT012>
- Immediately notify NDEE of any material modifications to the plan.
- Consent of offsite property owners which have been impacted is required for work done on the offsite property.
- If draining the second digester becomes necessary to prevent a catastrophic discharge, notify NDEE immediately.
- Develop contingency plan to address migration that may occur beyond barricade 3.

Note that the plan is lacking in sufficient detail to completely evaluate but we do not want to delay commencement of cleanup efforts. Post response confirmation sampling and long-term restoration if needed will be addressed in separate communications later as may other issues that arise.

While your chosen course of action may result in temporary violation of the emergency order not to add wastes to the lagoons, NDEE will take into consideration the need to take such emergency response measures to address the immediate discharge and mitigate further harm.

If you have any questions or need further guidance, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'B. Pracheil', with a long horizontal stroke extending to the right.

Brad Pracheil
Division Administrator for Inspection and Compliance