

souNebraska Department of Environment and Energy (NDEE)

MEMORANDUM

To: File

From: Hillary Stoll

Date: September 11, 2020

RE: AltEn, LLC

NDEE ID: 84069

Program ID: WWF, PCS NE0137634

Subject: Site Visit Report (Wastewater Aspects Only)

Summary of Site Visit and Information Acquired During Visit:

Mark Pomajzl, Jason Holsten, and Hillary Stoll (myself) arrived at the AltEn, LLC facility in Mead, Nebraska at about 9:00 AM on September 11, 2020. Scott Tingelhoff, facility manager, arrived at approximately the same time that we did. We stated that we were conducting a site visit and would like to tour the facility and observe the wastewater lagoons. At no time was access denied. Mr. Tingelhoff provided the tour. The observations included in this memorandum are only those that are related to wastewater. After the tour, we spoke with Mr. Tingelhoff and Mr. Ken Peterson for the exit summary.

Observations Noted:

- Mr. Tingelhoff said that the facility has been land applying wastewater this year to lower lagoon levels. He said that they sample for pesticides in the wastewater before land application. They collect a grab sample in the location of the lagoon that they are pumping from.
- Mr. Peterson and Mr. Tingelhoff estimated that the average daily flow to the lagoons is about 100,000 gallons per day.
- A wastewater (thin stillage) spill/overflow was observed at the facility during the visit (Photos 1-4, 6). Mr. Peterson stated that this was due to a pump failure, and it was being repaired while we were there. He said the spill had occurred that morning.
- The water level in the northwest and northeast lagoons was lower than it was during the last lagoon inspection in November 2019. The south lagoon level was higher due to wastewater being transferred from the northeast lagoon to the south lagoon.
- The facility was in the process of completing a wastewater construction project while we were there. This involved moving the pipe that transports wastewater to the northwest lagoon. The pipe was moved from the toe of the lagoon dike to closer to the top of the lagoon dike. Moreover, a junction box and air relief valve appear to have been moved



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(Photos 29-31). They anticipated that the construction work would be completed by the end of the day.

- The northeast lagoon liner continues to have many large “whales” and tears (Photos 8-19, 23, 24, 28). The condition has seemed to worsen over time.
- The northwest lagoon still has two “whales” (Photos 20, 32). It also has a couple small liner tears (25, 26, 33). There are a couple locations where the edge of the liner, which is supposed to be buried at least two feet under the ground (anchor trench), is visible from the ground surface (Photos 21, 22).

Concerns:

- A wastewater (thin stillage) spill was observed due to equipment failure. A wastewater spill was observed due to equipment failure during the last lagoon inspection, as well (November 2019). Proper maintenance and operation of wastewater equipment are essential to preventing these issues.
- The northeast lagoon liner is still significantly damaged. The condition of the liner has seemed to worsen over time. In some locations, the liner is completely torn and the ground underneath the liner is visible.
- The northwest lagoon still has “whales” that need to be repaired. If these are not repaired in a timely manner, further damage could occur to the liner. Moreover, in addition to the “whales”, there are small liner tears (photos referenced above). The edge of the liner is also visible from the ground surface in several areas. The edge of the liner is supposed to be at least two feet below the ground (anchor trench). In addition to repairing the “whales” in the northwest lagoon, these concerns should also be evaluated and addressed.
- The facility should currently not be land applying wastewater per a Notice of Violation issued on September 13, 2019 (Document ID 20190056042).

Photos

Note: Not all photos taken at the site are included in this memorandum.

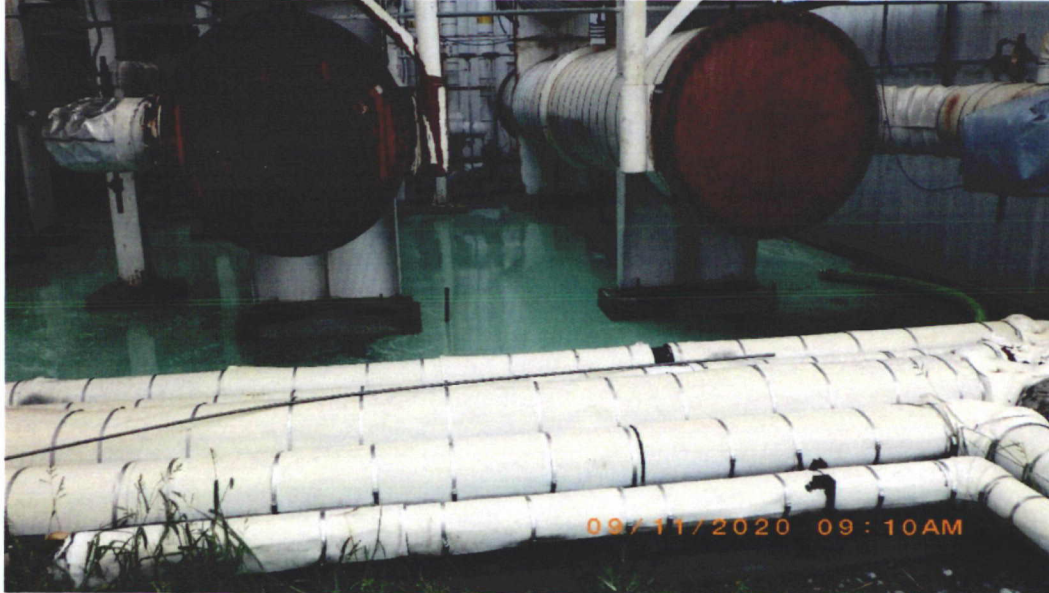


Photo 1

Date Taken: September 11, 2020

Photographer: Mark Pomajzl

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Wastewater (thin stillage) spill due to pump issue.



Photo 2

Date Taken: September 11, 2020

Photographer: Mark Pomajzl

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Wastewater (thin stillage) spill due to pump issue.



Photo 3

Date Taken: September 11, 2020

Photographer: Mark Pomajzl

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Wastewater spill due to pump issue.



Photo 4

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: North

Description: Wastewater overflow due to pump issue near north manhole.



Photo 5

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Inside of manhole – no observable concerns about interior of manhole.



Photo 6

Date Taken: September 11, 2020

Photographer: Mark Pomajzl

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: South

Description: Wastewater overflow due to pump issue near manhole.



Photo 7

Date Taken: September 11, 2020

Photographer: Mark Pomajzl

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Northwest

Description: Pump for moving wastewater from northeast lagoon to south lagoon for repairs.



Photo 8

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Apparent tear in northeast lagoon liner. The liner between the south and northeast lagoons was too slick to observe the south side of the northeast lagoon up close.



Photo 9

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Vegetation/liner damage on east side of northeast lagoon.



Photo 10

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Vegetation/liner damage on east side of northeast lagoon.



Photo 11

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Northwest

Description: Liner on east side of northeast lagoon.



Photo 12

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Liner on east side of northeast lagoon. Large "whale" is visible.



Photo 12

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Liner at northeast corner of northeast lagoon. "Whales" are visible.



Photo 13

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southeast

Description: View of liner damage from north side of northeast lagoon. Large liner tear is visible.

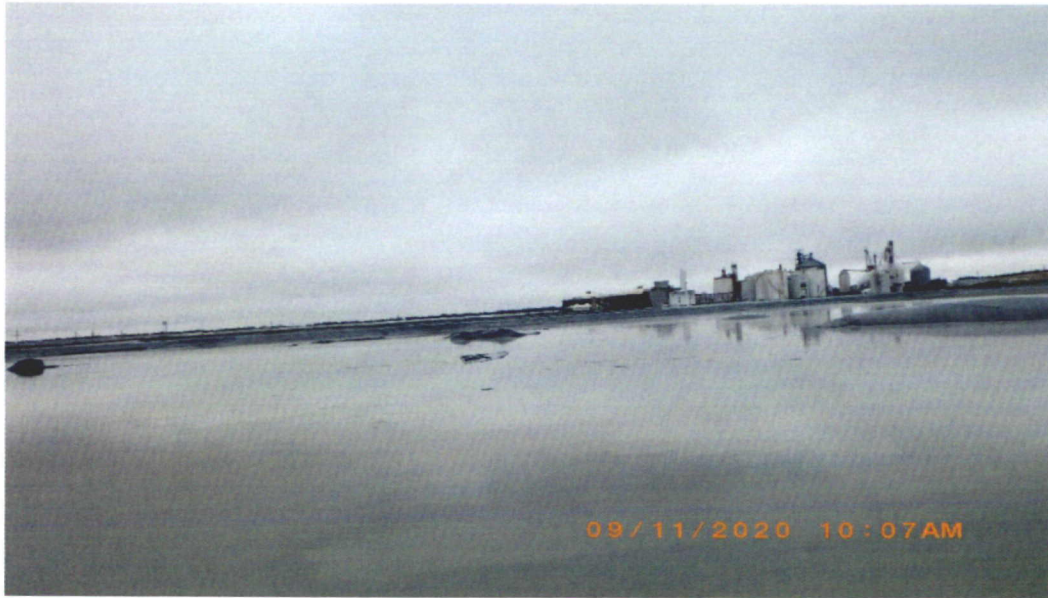


Photo 14

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: View of liner damage from north side of northeast lagoon.



Photo 15

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: View of liner damage from north side of northeast lagoon. Liner "whales" and tears are visible.



Photo 16

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Liner damage/tear on north side of northeast lagoon. The ground underneath the liner is visible.



Photo 17

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner damage near northwest corner of northeast lagoon.



Photo 18

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner damage near northwest corner of northeast lagoon.



Photo 19

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Liner damage near northwest corner of northeast lagoon.



Photo 20

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: West

Description: "Whale" in northwest lagoon from east side of northwest lagoon.



Photo 21

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner visible under backfill on east side of northwest lagoon. This should be adequately anchored underground.



Photo 22

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Edge of liner visible under backfill on east side of northwest lagoon. This should be anchored underground.



Photo 23

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner damage on west side of northeast lagoon.



Photo 24

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner damage on west side of northeast lagoon.



Photo 25

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Small liner tear on east side of west lagoon.



Photo 26

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Small liner tear on east side of west lagoon.



Photo 27

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Southeast side of northwest lagoon.



Photo 28

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner damage on west side of northeast lagoon.



Photo 29

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: Southwest

Description: Junction box with pipes entering the northeast and south lagoons.

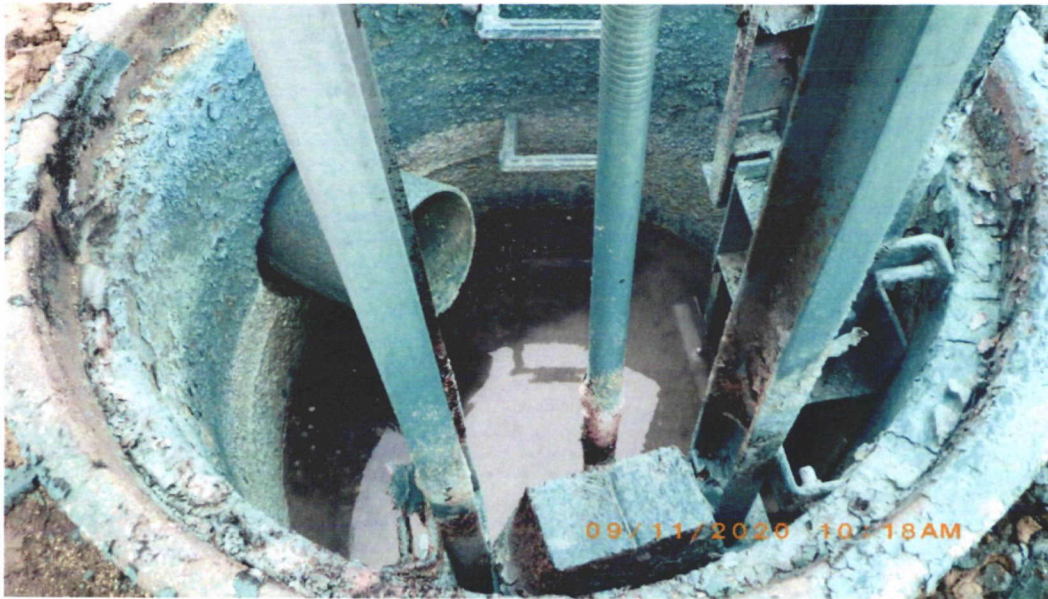


Photo 30

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Inside of junction box (sand and gravel accumulation in bottom).



Photo 31

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Air relief valve near south lagoon.



Photo 32

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: North

Description: Liner "whale" in northwest lagoon.



Photo 33

Date Taken: September 11, 2020

Photographer: Hillary Stoll

Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634

Direction Facing: N/A

Description: Liner tear near southwest corner of northwest lagoon.