
NPDES Wastewater Section

1200 'N' Street, Suite 400, The Atrium

P.O. Box 98922

Lincoln, NE 68509-8922

Tel. 402/471-4220 / Fax 402/471-2909

MEMORANDUM

To: File

From: Hillary Stoll

Through: Reuel Anderson, Mark Pomajzl, and Jason Windhorst

Date: November 12, 2019

RE: AltEn, LLC, Mead, Nebraska

NDEE ID: 84069

Program ID: NE0137634, NER910444

Subject: Wastewater Sampling Report

Wastewater Sampling Event on November 12, 2019

On November 12, 2019, Mark Pomajzl, Jason Windhorst, and I (Hillary Stoll) arrived at the AltEn, LLC facility in Mead, Nebraska at about 10:00 AM. The weather was sunny and windy, and the temperature was about 15 degrees Fahrenheit. We entered the facility and presented our credentials to facility staff. We stated that we were there to conduct wastewater sampling of the lagoons, of which the facility had been notified of several working days before. Mr. Dean Egr of AltEn accompanied us to observe the wastewater sampling process.

The wastewater samples were collected in accordance with EPA Standard Operating Procedure SEDPROC-306-R4, effective date of February 13, 2017. The sampling procedure details are also described herein.

A composite wastewater sample was collected from the Northeast lagoon (referred to as the "North" lagoon). A composite wastewater sample was also collected from the Northwest lagoon (referred to as the "West" lagoon). The South lagoon was not sampled because the wastewater level in the lagoon was too low to safely sample with the sampling pole.

The first lagoon that was sampled was the North lagoon. Eight one-liter grab samples were collected from the lagoon: one from each corner of the lagoon and one from the middle of each



side of the lagoon. These samples were combined in a clean bucket. The composite of the eight grab samples in the bucket was mixed, and then put into four one-liter HDPE sample bottles. Four samples were collected – two for the Department and two for AltEn – so that there would be duplicate samples to be used for quality control (QC).

The bucket used for the composite sample and the sample bottle attached to the pole (sampling apparatus) were cleaned with deionized (DI) water in the field after sampling the North lagoon. A field blank was then collected to ensure equipment cleanliness in the field. The sampling apparatus and bucket were both used to collect the field blank.

The second lagoon that was sampled was the West lagoon. It was sampled in the same manner as the North lagoon described above. The eight sampling locations for the West lagoon composite sample were approximately the same locations that were sampled during the last sampling event at AltEn on April 8, 2019. GPS coordinates were recorded at these locations while sampling in April.

While collecting our samples, we collected double samples of everything so that AltEn received the same samples.

Other Information Acquired at Visit

Mr. Dean Egr provided information while we were at the facility. The information he provided included the following:

- There are currently about eight feet of solids in the South lagoon.
- During normal operation, the influent wastewater from the plant enters the West lagoon, then flows into the North lagoon, and then finally into the South lagoon. According to Mr. Egr, they usually withdraw water for land application from either the southeast corner of the North lagoon or the northeast corner of the South lagoon. He said that it depends how dirty the water looks in each of the lagoons.
- Mr. Egr notified us that there was a wastewater spill on November 11, 2019 (documented in photos). He used our visit as an opportunity to report the spill, which was still within 24 hours of the spill. The facility will be sending in a report for the spill. Based on Mr. Egr's description of the spill, it seemed to be caused by a failure of the connecting hose between the air relief valve and the South lagoon.
- The data the Department received on October 25, 2019 from the facility included data for both a sludge and wastewater sample. Mr. Egr said that the sludge sample was collected from the sludge on the side of the South lagoon. He said the wastewater sample was a single grab sample collected from where they land apply.
- A flow meter was installed in September on the lagoon effluent land application pipe.

Signature Hilary Stall

Date 12/05/2019

Attachments: 1) Photos
2) Site Map
3) Sample Chain of Custody Records
4) Exit Summary

1) Photos

Note: Not all photos taken while at the facility are included in this report.



Photo 1

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: Southeast

Description: Second grab sample collected from North lagoon (northwest corner of lagoon); First grab sample not pictured, but was from the north side of the lagoon between the northeast and northwest corners



Photo 2

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: East

Description: Third grab sample collected from North lagoon (middle of west side)



Photo 3

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Fourth grab sample collected from North lagoon (southwest corner)



Photo 4

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Sixth grab sample collected from North lagoon (southeast corner); Fifth grab sample not pictured, but was collected from the south side of the lagoon between the southwest and southeast corners



Photo 5

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Seventh grab sample collected from North lagoon (middle of east side)



Photo 6

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: Northwest

Description: Eighth and final grab sample collected from North lagoon (northeast corner)



Photo 7

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: South

Description: First grab sample collected from West lagoon (middle of north side)



Photo 8

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: East

Description: Second grab sample collected from West lagoon (northwest corner)



Photo 9

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Third grab sample collected from West lagoon (middle of west side)



Photo 10

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: Northeast

Description: Fourth grab sample collected from West lagoon (southwest corner)



Photo 11

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: Northwest

Description: Fifth grab sample collected from West lagoon (middle of south side)



Photo 12

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Sixth grab sample collected from West lagoon (southeast corner)



Photo 13

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Seventh grab sample collected from West lagoon (middle of east side)



Photo 14

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Eighth grab sample collected from West lagoon (northeast corner)

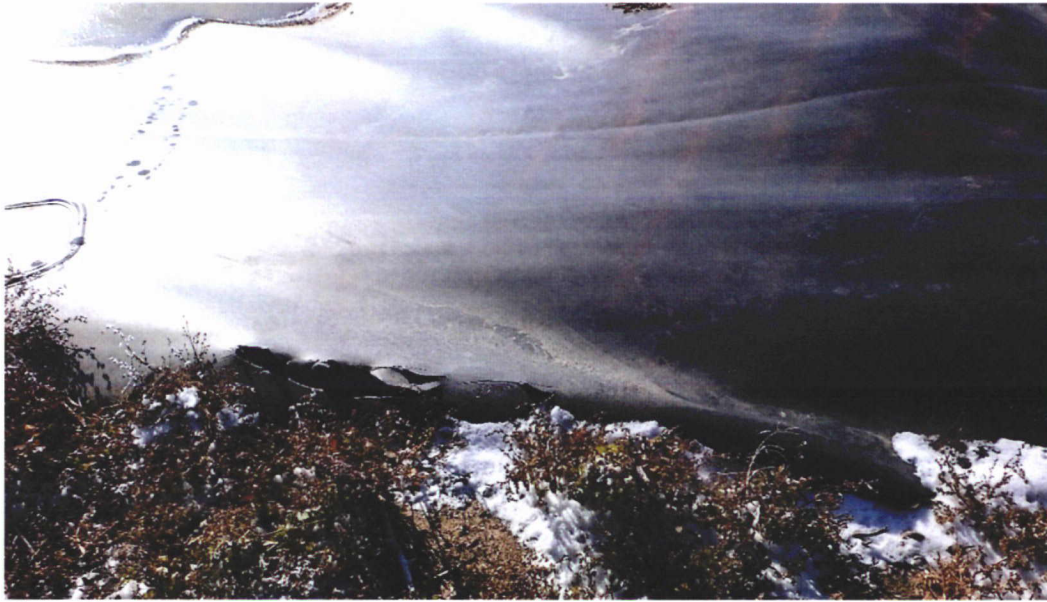


Photo 15
 Date Taken: November 12, 2019
 Photographer: Hillary Stoll
 Facility Name/Project Name: AltEn, LLC, Mead, NE
 Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444
 Direction Facing: N/A
 Description: Tear on North lagoon liner (middle of north side)



Photo 16
 Date Taken: November 12, 2019
 Photographer: Hillary Stoll
 Facility Name/Project Name: AltEn, LLC, Mead, NE
 Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444
 Direction Facing: Southwest
 Description: Spilled wastewater on lagoon dike



Photo 17

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: Southwest

Description: Spilled wastewater on lagoon dike



Photo 18

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Spilled wastewater on lagoon dike



Photo 19

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Animal burrow near North lagoon liner (east side)



Photo 20

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: North

Description: Spilled wastewater on south side of South lagoon dike



Photo 21

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Tear in West lagoon liner (south side)

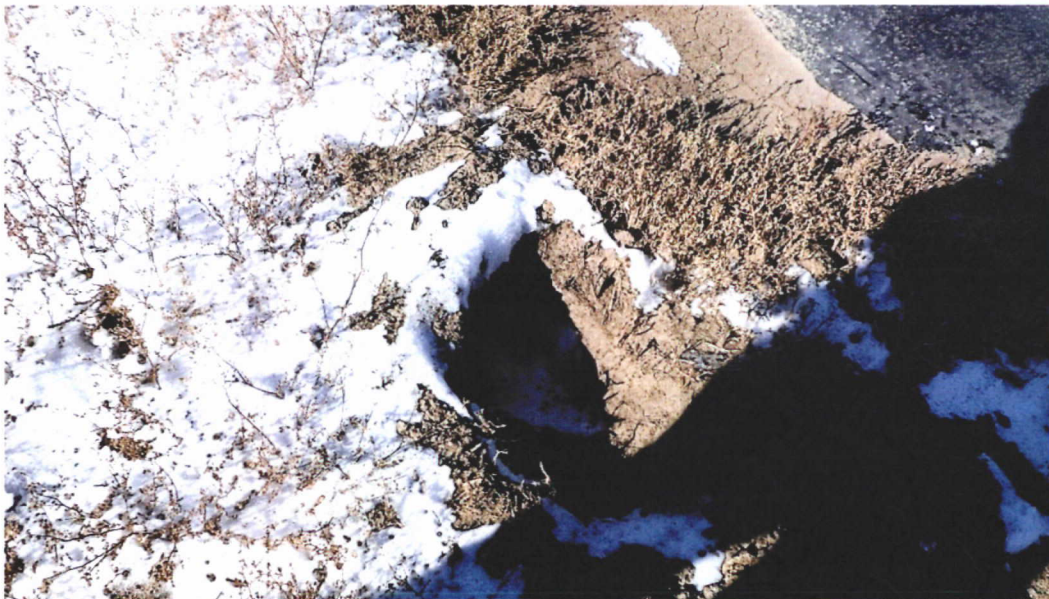


Photo 22

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: N/A

Description: Animal burrow near West lagoon liner (south side)



Photo 23

Date Taken: November 12, 2019

Photographer: Hillary Stoll

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

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: North

Description: Spilled wastewater on south side of South lagoon dike



Photo 24

Date Taken: November 12, 2019

Photographer: Hillary Stoll

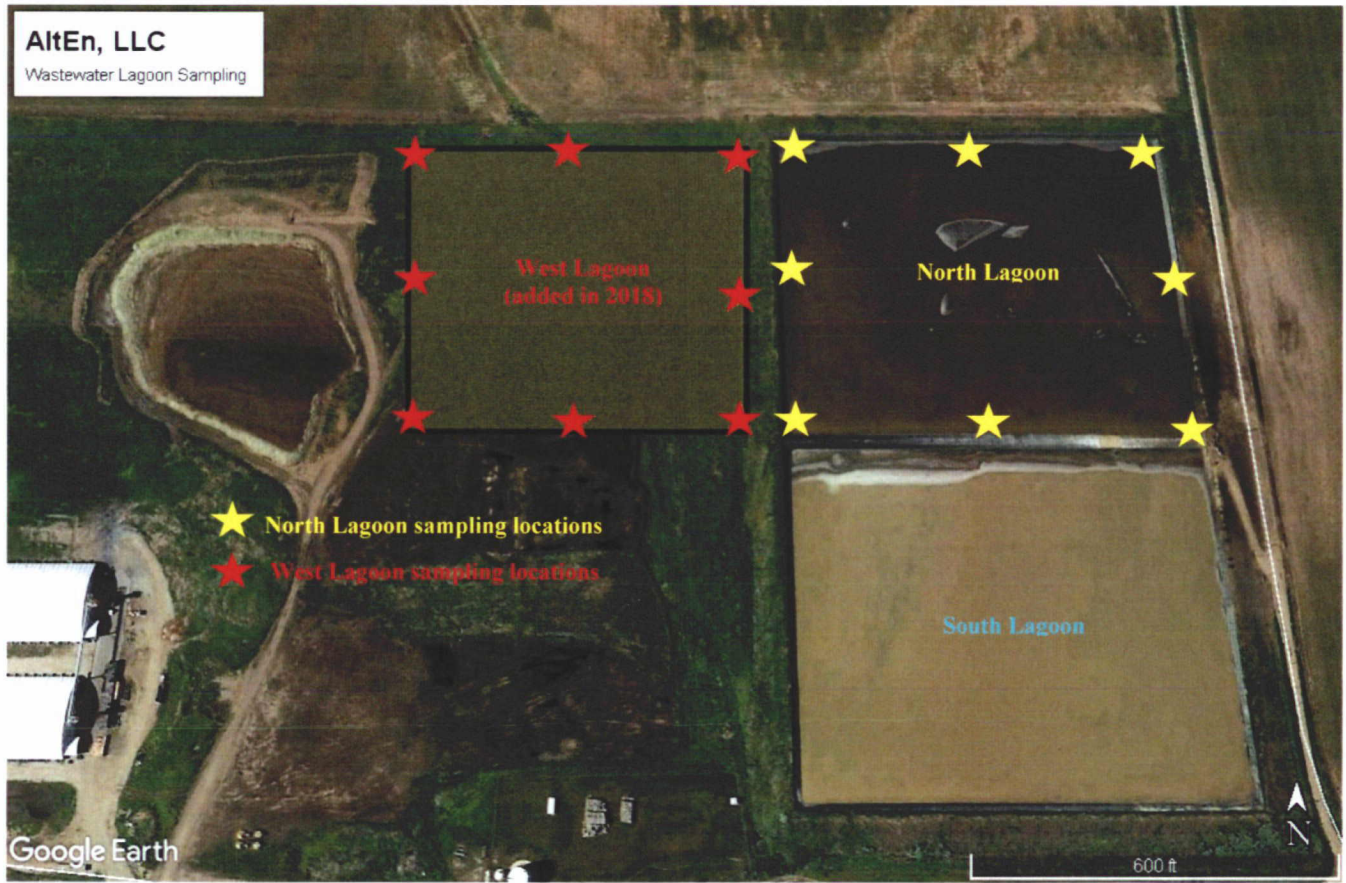
Facility Name/Project Name: AltEn, LLC, Mead, NE

Facility IIS number/Project Identifier: IIS #84069, PCS NE0137634, NER910444

Direction Facing: North

Description: Spilled wastewater on east side of South lagoon dike

2) Site Map



Google Imagery Date: 05/05/2016

Chain of Custody Record

Sample Site: AltEn, LLC Wastewater Lagoons

This CoC is for the samples collected by NDEE for NDEE (Sample Set 1). Split samples were left with AltEn, LLC. These samples were collected in the same manner as the samples retained by NDEE. The samples left with AltEn, LLC, are referred to as Sample Set 2. This CoC will be sent with Sample Set 1 to the lab. A copy of this CoC will remain with NDEE.

Project Name: AltEn Wastewater Sampling 11/12/2019

Sampler Name(s) (Print): Mark Pomajzl, Hillary Stoll, and Jason Windhorst

Sampler Name(s) (Signature):

Hillary Stoll *Mark Pomajzl*

Sample ID	Sample Date	Sample Time	Sample Type*	Grab or Composite?	Media	Comments	Lab Use
South Lagoon - AltEn	11/12/2019		WS	C	WW		
North Lagoon - AltEn	11/12/2019	10:30 AM	WS	C	WW		
West Lagoon - AltEn	11/12/2019	11:45 AM	WS	C	WW		
Field Blank (Before Sampling) - AltEn	11/12/2019		FB	N/A	DI		
Field Blank (Between North Lagoon and South Lagoon Sampling) - AltEn	11/12/2019	11:00 AM	FB	N/A	DI		
Field Blank (Between South Lagoon and West Lagoon Sampling) - AltEn	11/12/2019		FB	N/A	DI		
North Lagoon Duplicate Sample - AltEn	11/12/2019	10:30 AM	WSQ	C	WW	Duplicate obtained from composite sample bucket for North Lagoon.	
Trip Blank - AltEn	11/12/2019	—	TB	N/A	DI	Trip Blank- do not open.	

*If it is a normal sample, write WS. If it is a duplicate, write WSQ. If it is a trip blank, write TB. If it is a field blank, write FB.

Relinquished by: *Hillary Stoll* - 11/12/19 ~ 3:30 PM

Received by:

Date/Time:

Mark Pomajzl 11/12/19 ~ 3:30 PM

Relinquished by:

Received by:

Date/Time:

Shipment Method:

Chain of Custody Record

Sample Site: AltEn, LLC Wastewater Lagoons

Project Name: AltEn Wastewater Sampling 11/12/2019

Sampler Name(s) (Print): Mark Pomajzl, Hillary Stoll, and Jason Windhorst

This CoC is for the split samples left with AltEn, LLC. These samples were collected in the same manner as the samples retained by NDEE. The samples left with AltEn, LLC, are referred to as Sample Set 2. This is a copy of the CoC left with AltEn, LLC.

Sampler Name(s) (Signature):

[Signatures: Mark Pomajzl, Hillary Stoll, Jason Windhorst]

Sample ID	Sample Date	Sample Time	Sample Type*	Grab or Composite?	Media	Comments	Lab Use
South Lagoon - AltEn	11/12/2019		WS	C	WW		
North Lagoon - AltEn	11/12/2019	10:30 AM	WS	C	WW		
West Lagoon - AltEn	11/12/2019	11:45 AM	WS	C	WW		
Field Blank (Before Sampling) - AltEn	11/12/2019		FB	N/A	DI		
Field Blank (Between North Lagoon and ^{West} South Lagoon Sampling) - AltEn	11/12/2019	11:00 AM	FB	N/A	DI		
Field Blank (Between South Lagoon and West Lagoon Sampling) - AltEn	11/12/2019		FB	N/A	DI		
North Lagoon Duplicate Sample - AltEn	11/12/2019	10:30 AM	WSQ	C	WW	Duplicate obtained from composite sample bucket for North Lagoon.	
Trip Blank - AltEn	11/12/2019	—	TB	N/A	DI	Trip Blank- do not open.	

*If it is a normal sample, write WS. If it is a duplicate, write WSQ. If it is a trip blank, write TB. If it is a field blank, write FB.

Relinquished by:

[Signature: Hillary Stoll] - NDEE 11/12/19 12:15 PM

Received by:

[Signature: Jason Windhorst] AltEn

Date/Time:

11-12-19 12:26 PM

Relinquished by:

Received by:

Date/Time:

Shipment Method:

1 of 1

copy

State of Nebraska
Department of Environmental Quality
Sample Receipt*

Date 11/12/19 Time 12:22 pm

Sample ID	Site of Sample	Sample Type
North Lagoon	—	Composite
West Lagoon	—	Composite
Field Blank	West Lagoon	& Rinse between lagoons
North Lagoon, Duplicate	—	Composite
TRIP Blank	—	- before Sampling
Comments:		

Owner/Operator: Scott Tinglehoff Title: plant manager

Facility Name: AHEA

Location/Address: MEAD, Nebraska

Signed: [Signature] Facility Representative
Signed: [Signature] NDEQ Representative

Inspection Exit Summary

NDEQ ID: 84069 NDEQ Program ID: _____ NDEQ Notification #: _____Facility/Operation Name: AITEN

Address _____

City/Town: MEAD, County Sandwich, State of Nebraska.Owner/Occupant/Operator Inspection Contact(s): Scott Tinglehoff

Inspector	Phone No	E-Mail address
<u>Mark Pomajzl</u>	<u>402-471-2936</u>	<u>Mark.Pomajzl</u> @nebraska.gov
		@nebraska.gov

Mailing Address: Department of Environmental Quality, PO Box 98922, Lincoln, Nebraska 68509-8922

Inspection Date: 11/12/19 Start Time: 9:45am End Time: 12:39pm☐ No concerns observed☐ Further agency discussion needed☒ Concerns observed:SPILL From Air Vent Valve Cause green water to Exit behind
South Lagoon☒ Actions to be performed immediately or as soon as reasonably practical:Keep her up to date on the progress on Air Vent Valve**Please notify the Inspector when the above actions are completed.**

The Department will provide a final inspection report to you usually within 45 days of the inspection. 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 Environmental Quality and your prompt attention to the documented concerns will be considered in assessment of your voluntary compliance. This summary was left with: Scott Tinglehoff. Please contact the Inspector if you have any questions concerning this inspection exit summary.

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

Mark Pomajzl
Inspector SignatureScott Tinglehoff
Inspection Contact Signature

revised 12/11/15