

To: File

Through: Jeff Edwards, Compliance Unit Supervisor, Waste Management Section *JE*

From: Jason Holsten, Program Specialist II, Waste Management Section

Date: April 13, 2018

RE: Site Investigation Report
AltEn, LLC
1344 County Road 10
Mead, NE 68041

NDEQ ID: 84069

Program ID: NE0204447 (IWM)

NEC #: 041018-AB-1328

On 4/9/18, I received a note from Jeff Edwards, NDEQ, concerning a complaint received by the department from Paula Dyas, (402) 317-0171. Ms. Dyas lives at 948 County Road P near Mead, NE. The complaint was regarding AltEn and material they were spreading on land directly east of the Dyas property. Ms. Dyas requested to be kept informed.

On 4/10/18, at 11:07 a.m., I contacted Jim Stewart, AltEn Vice-President and Plant Manager, to discuss the complaint received from Ms. Dyas. Mr. Stewart confirmed that AltEn had been delivering wet distillers grain (hereinafter material) to area farm fields for land application. He said they finished up last week. Mr. Stewart said Ms. Dyas and her husband had been in contact with Dean Egr, ADNR Manager / Assistant Production Manager. According to Mr. Stewart, material had been stockpiled onto an adjacent field before spreading and the Dyas's dogs ate some of the material from the pile. Ms. Dyas said the dogs were taken to a veterinarian who couldn't find anything toxic in them and they were fine two days later.

Mr. Stewart could not think of what may be in the material that would have made the dogs sick. He said he hasn't seen any dead animals near the material being stored on AltEn property and commented how there are a number of rabbits that run around the material. He said some of the material has been sitting there for over a year and doesn't know what the issue would be. He informed me that Mr. and Mrs. Dyas had also contacted the landowner who was applying the material to their field.

Mr. Stewart and I discussed that the material was considered a product with nutritional value thus the reason for land application. Mr. Stewart said samples are taken of the material prior to land application to determine the proper agronomic rates for application. AltEn works with Nutrient Advisors to determine the application rates for land application while also taking into

consideration the soil conditions of the field. We brainstormed possible reasons for any of the signs and symptoms allegedly exhibited by the dogs as explained by Ms. Dyas which included them stumbling around and having dilated pupils. I asked if maybe there were molds or fungus present in the material that contributed to the dog's symptoms. Mr. Stewart wondered if maybe there was re-fermentation of the material which created some alcohol. We both agreed that we are not toxicologists and/or experts in determining what, if anything may be in the WDG that might affect animals if they were to consume it.

I informed Mr. Stewart that I was going to talk to Ms. Dyas regarding our discussion. He expressed that AltEn wants to be a good neighbor and has been trying to address the concerns brought up by Ms. Dyas. I encouraged him to keep the lines of communication open with her and any others that may call to voice their concerns. Our conversation ended at 11:26 a.m.

I called Ms. Dyas shortly after hanging up with Mr. Stewart. Ms. Dyas confirmed with me that she was concerned with what was being spread onto the fields since her dogs got sick from eating the material. She said the dogs were taken to a veterinarian who did not find anything toxic in the animals. The dogs were stumbling and had dilated pupils after eating the material. After 3-4 days it appeared to clear up and the dogs exhibited no more symptoms. The material was spread onto fields that came up to her property along with a grassy area in between. She told me the material was spread onto the field last Thursday.

I explained to Ms. Dyas that after talking with Mr. Stewart, the material being land applied was wet distillers grain (WDG) which was considered similar to a product and not a waste. Since it has nutrient value, is analyzed for its nutrient value, and is being applied at the proper agronomic rates, AltEn was not violating any of the department's solid waste regulations. I also explained that Mr. Stewart and I brainstormed some other possible explanations for the dogs getting sick, i.e. molds/fungus and/or alcohols but cautioned her that we were not toxicologists or experts in that matter. She said she talked to a sister who shared a story about cows getting sick from eating similar type material that turned out to be high in sulfur content.

I encouraged Ms. Dyas to keep her dogs on a leash to prevent them from eating any of the material being land applied. She agreed that they needed to do that but also expressed concern about material on her property or the green way that wouldn't get disked in. I shared with her Mr. Stewart's comment that after it dries out it could be considered similar to dirt. She did not necessarily agree with that and said that 5-days later her dogs still had effects if they ate the material.

On 4/10/18, Mr. Edwards forwarded me an additional complaint (NEC #041018-AB-1328) received by the department (Attachment I). The complaint was marked anonymous and responsible party was listed as Mead Cattle Company. It was later learned that this complaint involved AltEn, not Mead Cattle Co., and the land application of WDG generated from the facility. Mr. Edwards forwarded additional information regarding this complaint in an email he received from Deb Meyers, NDEQ (Attachment II). In addition, I also received an email forwarded from Kevin Franzluebbbers, NDEQ, on 4/11/18, which said that the complainant called back to the department and asked to be contacted in regards to the complaint and no longer wished to be anonymous (Attachment III). The complainant for NEC #041018-AB-1328, Jody Weible, provided her contact information, (402) 624-2220.

I contacted Ms. Weible on 4/12/18 at 9:04 a.m. to discuss the complaint she filed with the department. She said material was dumped on a field located south of the subdivision she lives in on Saturday or Sunday and was spread onto the field on Sunday or Monday. It had not yet

been tilled in. Piles of the material were 15-20 feet tall. She contacted the farmer who owned the land on Tuesday night and said he started tilling the field on Wednesday since she could hear the tractor in the field from her residence

She said odors from the material caused headaches, burning eyes, and stomach aches. The smell was a sweet/sour smell but is acrid and burns. She mentioned the smell wasn't as bad today. She said dogs got sick and even heard a hawk landed on a pile of the material and died. I shared with her the conversation I had with Ms. Dyas regarding her thoughts on her dogs getting sick from eating the material. Ms. Weible said she heard the material was compost from rotten seed corn that had been steamed and that other stuff, like beer and whiskey, was mixed with it. She also heard dead cows were being composted and could be in the material. She was also concerned with the material potentially impacting the groundwater and mentioned a 45-ft deep well located in the area. She said the flow direction of groundwater wouldn't necessarily impact her well but could impact the cities of Gretna and Lincoln's drinking water.

She said the Village Board had a meeting and a neighbor brought in a sample that they're going to have analyzed to see if it's toxic. She said the sample was collected from the field just south of her and the one referenced in her complaint. She told me that city ordinance requires the material to be tilled in within 12 hours and a 24-hr notice has to be given to residents before bringing material to any field. I informed Ms. Weible that I was going to AltEn this afternoon and would also check out the field located south of her where the material was alleged to be land applied. I would contact her regarding the results of my investigation. Our conversation ended at 9:22 a.m.

On 4/12/18, Dave Haldeman, NDEQ, Mr. Edwards and I conducted a site investigation at AltEn. We arrived at the site at 12:00 p.m. and met the following facility representatives: Jim Stewart, Scott Tingelhoff-Legal and Regulatory Compliance, Dean Egr, and Mary Tingelhoff-Environmental Health & Safety. Mr. Egr is the individual working with local farmers and making arrangements to land apply the material.

We discussed with facility representatives the two complaints received by the department. Facility representatives provided a brief overview of facility processes and what activities have recently occurred. It was explained to us that WDG is generated at the ethanol plant. The material currently being stored on the north end of their facility consisted of this WDG as well as WDG that had previously been stored on the compost pad. Mr. Stewart acknowledged that the material from the compost pad was never composted and was actually WDG. No materials have been accepted from off site and mixed with this material. Some of the older material located on site has been there for 1 ½ - 2 years. Odor is noticeable when the material gets stirred up while loading it into trucks for land application.

The compost pad has been empty at least a year. Ethanol Plant operations resumed two days ago and WDG being generated is being stored onsite for eventual use in the Biochar process. The facility stopped running the Biochar process yesterday in order to clean the equipment. Some of the WDG being processed is like mud which resulted in the facility having to stop operations in order to clean the equipment. The facility is now turning some of the material and mixing with newer material in order to dry it out better before processing it through the Biochar system, thereby hopefully preventing clogging problems from happening again.

Mr. Tingelhoff said there was a Village Board meeting on Tuesday. He had offered to speak at the meeting but was told he was not on the agenda. As it turned out, he could have talked during

the “nuisance” portion of the meeting but he was unaware of this. Local residents were given an opportunity to voice concerns during this agenda item during the meeting.

Mr. Tingelhoff said he received a phone call from Craig Breunig regarding the complaint filed by Ms. Weible. Mr. Breunig is on the Saunders County Board of Supervisors and represents District 3 for Saunders County. Mr. Tingelhoff told Mr. Breunig that he offered to talk to any complainants directly regarding any concerns they may have. He added that he was trying to get additional information from Ms. Dyas concerning her sick dogs, to include copies of veterinarian records, in order to determine if there is anything the facility could sample for. He had not received any information as of the date of our meeting.

When asked, facility representatives said they were unaware of any local ordinances requiring 12-hr and/or 24-hr notices being required as explained by Ms. Weible. We encouraged them to talk to the Village Board to determine if this was a requirement. Mr. Tingelhoff said he would review the local ordinances. We discussed possible best management practices that could be implemented, i.e., land apply the material when winds are favorable and coordinate with the farmer on material delivery to the site so that it can be incorporated into the soil as soon as possible. Mr. Stewart commented that some local farmers are now a little reluctant in using this material for land application based upon the complaints received.

After our discussion with facility representatives, we all proceeded to the area on the north end of the site where the material was being stored and removed for land application. Photographs of this area can be seen in Attachment IV (Photographs 1-6). While walking around and observing this area; a slight odor, presumably from the material, was detectable but not irritating. None of the individuals in our group commented on being troubled by any of the odors.

After observing the area where material was being stored, we proceeded off site to two different locations where the material had recently been land applied, one of which was referenced in the complaint received by Ms. Weible. Both of these locations have been marked on a Google Earth image and have been labeled “A” and “B” (Attachment V). The field location referenced in Ms. Weible’s complaint is the area marked “B.” In addition, photographs at both locations were taken (Photographs 7-14).

Facility representatives said the farmer makes arrangements with them to haul the material to fields for land application. Samples of the material are collected for analysis to determine the proper agronomic rates for land application. Nutrient Advisers spreads the material on the fields and most farmers try to incorporate it into the soil as soon as possible. Mr. Egr said at location “A” the material was delivered to the site on Friday and was incorporated into the soil on Saturday or Sunday.

While at both locations (A & B), odors similar to those present where the material was being stored on site at AltEn were detectable but not overwhelming or troublesome to anyone in the group. The farmer at site B was actively incorporating the material into the field by disking. At both locations, the material consisted of small clumps. Some material was noted on the edges of the fields which would not be disked in. Facility representatives believed over time this material would break down.

Prior to departing the site, we explained to the facility representatives that we did not observe any violations of the department’s solid waste regulations. We encouraged them to continue removing the material as required in the department’s December 18, 2017, Letter of Warning

(LOW). It appeared that the facility has been making progress in removing the material required of them in the LOW.

On 4/13/18, I contacted Ms. Weible to discuss our site investigation. I explained to her that we did not observe any violations of the department's solid waste regulations. I told her that we were at the fields located across the street and directly south of the subdivision she resides in. She said she had heard we were there and hoped to talk with us but we had left by the time she got off the telephone. She asked about and quoted what turned out to be a local ordinance regarding odors. I explained that unfortunately there is no department regulation concerning odors and added that we could not enforce a local ordinance and that she would have to contact her local governing board. She did not believe that would be successful. She mentioned she contacted the EPA regarding this issue. I said there's a good chance that they would refer it back to us as that's typically what happens. She said that two samples of material had been collected and given to the Village for analysis. I encouraged her to contact the facility directly with any questions/concerns she may have as they expressed a willingness to talk directly with any concerned residents.

Attachment I – Notification of Environmental Concern (NEC) #041018-AB-1328 (1 page, double-sided)

Attachment II – 4/10/18 Email from Deb Myers, NDEQ, to Jeff Edwards, NDEQ (1 page, double-sided)

Attachment III – 4/11/18 Email from Kevin Franzluebbbers, NDEQ (1 page)

Attachment IV – Photographs (7 pages)

Attachment V – Google Earth Image w/ notes (1 page)

ATTACHMENT I

Notification of Environmental Concern

#041018-AB-1328



REPORT RECEIVED BY Aaron Boucher	DATE 04-10-2018	TIME 13:28 PM	REPORTED VIA Phone	NOTIFICATION NUMBER 041018-AB-1328	NDEQ ID #
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ANONYMOUS REPORT Yes	CONFIDENTIAL REPORT No	KEEP REPORTING PARTY INFORMED
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PROBLEM LOCATION

	PROBLEM LOCATION	RESPONSIBLE PARTY	REPORTING PARTY
NAME			
POSITION TITLE			
BUSINESS NAME	Mead Cattle Company & MRE	Mead Cattle Company & MRE	
STREET OR PO BOX			
ADDRESS LINE 2			
CITY - STATE - ZIP	Mead NE 68041	Mead NE 68041	
E-MAIL ADDRESS			
WORK PHONE			
CELL PHONE			
HOME PHONE			

COUNTY	DIRECTIONS West on 92 to Mead -- south on County Road 10 -- two miles on the left side of the road
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QUARTER	SECTION	TOWNSHIP	RANGE	MARKER	MILE	ROAD NAME	LATITUDE	LONGITUDE
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LAKE ID	LAKE	RIVER BASIN (LAKE)
STREAM ID	STREAM	RIVER BASIN (STREAM)
HUC	HYDROLOGIC UNIT NAME	SUBDIVISION



20180034485

OBSERVATIONS

WHAT IS THE PROBLEM?

A large mound of yellow material that is being used as compost -- very strong odor

WHERE AT THE SITE IS THE PROBLEM?

You can see the problem from County Road 10 -- a dam of yellow material

DESCRIBE ANY APPARENT PATTERNS OVER TIME

FIRST OBSERVED	LAST OBSERVED	ONGOING SITUATION	HOW LONG	OCCURRING NOW	RESPONSE TIMEFRAME
04-07-2018 08:00 AM	04-10-2018 01:45 PM	Yes	4	Yes	

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

EVIDENCE OF ENVIRONMENTAL DAMAGE -- EXPLANATION

OTHER PERTINENT DETAILS

WHO ELSE DID THE REPORTING PARTY CONTACT ABOUT THIS PROBLEM?

County Supervisors (left messages) -- also left message for State Attorney General's office

NDEQ PROGRAM REFERRALS

LEAD	PROGRAM ISSUE	PROG	PROGRAM ID	DATE CLOSED	REASON CLOSED	FIELD OFFICE
	Feedlots	LWC				

OTHER AGENCIES NOTIFIED

DATE	AGENCY	DIVISION	PROGRAM	REFERENCE #
04-10-2018	HEALTH			

ATTACHMENT II

4/10/18 Email from Deb Myers, NDEQ, to Jeff Edwards, NDEQ

Holsten, Jason

From: Edwards, Jeffery
Sent: Tuesday, April 10, 2018 4:44 PM
To: Gidley, Bill; Holsten, Jason
Subject: FYI ---FW: understand you got a complaint on Mead. Can you give me the information and I will follow up.

Here is what Deb Myers got this afternoon. See below.

Jeffery L. Edwards
Compliance Unit Supervisor
Waste Management Section

Nebraska Department of Environmental Quality
1200 N Street, Suite 400, The Atrium
Lincoln, NE 68509-8922
Phone: (402) 471-8309 Fax (402) 471-2909

<http://deq.ne.gov>

From: Myers, Deborah
Sent: Tuesday, April 10, 2018 4:25 PM
To: Edwards, Jeffery
Cc: NDEQ Policy Team
Subject: RE: understand you got a complaint on Mead. Can you give me the information and I will follow up.

Jeff,

Okay, here's what I have

Jody Weible
402-624-2220
Mead, NE

She said that the ethanol plant and Mead Cattle Company are composting material that is making people sick. She said that the piles are about dam high (30'?) and that the companies started dumping things last Saturday.

Location is off of County Road 10 about 1 ½ miles south of town near the facilities.

She has called the governor's office, state senator, other people as well. She also said there are rumors that a dog and hawk have died when they came in contact with the material.

Deb

From: Edwards, Jeffery
Sent: Tuesday, April 10, 2018 4:12 PM

ATTACHMENT III

4/11/18 Email from Kevin Franzluebbbers, NDEQ

Holsten, Jason

From: Franzluebbbers, Kevin
Sent: Wednesday, April 11, 2018 11:16 AM
To: Holsten, Jason
Subject: FW: Complaint 041018-AB-1328

From: Onken, Blake
Sent: Wednesday, April 11, 2018 10:57 AM
To: Franzluebbbers, Kevin
Subject: FW: Complaint 041018-AB-1328

Please forward... Thanks!

Blake Onken
Agriculture Section Supervisor
NDEQ
blake.onken@nebraska.gov

From: Baumann, Carly
Sent: Wednesday, April 11, 2018 10:49 AM
To: Onken, Blake; Chapman, Ryan
Cc: Ellis, Todd
Subject: Complaint 041018-AB-1328

Hi all,

I received a phone call today regarding a complaint filed yesterday (041018-AB-1328). The report says "anonymous" however, the complainant said she would like to be contacted and is fine with her name being on the report. Here is her contact info:

Jody Weible (402) 624-2220

Jody also mentioned another person from Mead went to this pile and took a sample which is now located in the village office (402) 624-2495.

Thanks,

Carly Baumann, Program Specialist, Air Quality
Nebraska Department of Environmental Quality
1200 N Street, The Atrium, Suite 400
P.O. Box 98922, Lincoln, NE 68508
Phone: 402.471.4212 | Fax: 402.471.2909 | <http://deq.ne.gov>

ATTACHMENT IV

Photographs



Photograph 1
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking east, photograph showing an area located north of the office building where wet distiller's grain (WDG) was previously being stored. Photograph taken to show progress made by facility in removing the material.

Note: WDG will be referred to as "material" in the narrative portion of the remaining photographs.



Photograph 2
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking north from the same vantage point as the previous photograph. Photograph taken to show the amount of material that has been removed from the site.



Photograph 3
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking northeast, photograph showing material that has settled over time. Mr. Stewart explained that over time the material settles and is not as voluminous as before.



Photograph 4
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Photograph showing a closer view of the material. Mr. Stewart said this material had been turned and mixed with newer material in order for it to dry before processing through the Biochar process. He also said color of the material can vary depending on the dye color of the seed corn being processed through the ethanol plant.



Photograph 5
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking north, photograph showing additional material being stored on site. Mr. Stewart said the material located in the upper left corner of the photograph was newer material.



Photograph 6
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking north northeast, photograph showing additional material being stored on site.



Photograph 7
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking east northeast, photograph of the field identified as "A" on the Google Earth image (Attachment V).



Photograph 8
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Photograph showing a closer view of the material after being spread onto the field. This material was observed laying on a grassy edge next to the field identified as "A" on the Google Earth image.



Photograph 9
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Another photograph showing the field identified as "A" on the Google Earth image. Mr. Erg said the material had been incorporated (disked) into the soil.



Photograph 10
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking south, photograph showing the field identified as "B" on the attached Google Earth image. This was the field mentioned in NEC #041018-AB-1328. This photograph was taken while standing near the intersection of Sunburst Lane and Joyce Circle.



Photograph 11
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking south, photograph taken to show a farmer incorporating (disking) the material into the soil on field "B."



Photograph 12
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Photograph taken to show a closer view of the portion of field "B" that had been disked to incorporate the material into the soil.



Photograph 13
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Photograph taken to show the area of field "B" where the material had not yet been incorporated (disked) into the soil. Note the material which appears as small clumps of soil.



Photograph 14
Date: April 12, 2018
Photographer: Jason Holsten
Camera: Nikon Coolpix L810
IIS# 84069, IWM Permit # NE0204447
NEC# 041018-AB-1328
Subject: AltEn, LLC Site Investigation

Looking east, photograph showing the area of field "B" that had not yet been disked by the farmer. Small clumps of material could be seen spread out over the area.

ATTACHMENT V



Google Earth Image w/ notes

AltEn 4/12/18 Site Investigation

NEC #041018-AB-1328

M

Legend

-  Mead
-  WDG Storage Location

Mead
Mead

11

L

K

10

WDG Storage Location

Google Earth

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