

NEBRASKA

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DEPT. OF ENVIRONMENT AND ENERGY

April 14, 2021



Pete Ricketts, Governor

Mr. Scott Tingelhoff
AltEn, LLC
Capital Corporate Services, Inc.
Suite 800
1125 S. 103rd ST.
Omaha, NE 68124

**RE: Environmental Site Investigation, AltEn, LLC., Mead, Nebraska
IIS# 84069**

Dear Mr. Tingelhoff:

This letter is in response to improper solid waste and wastewater management activities conducted at the AltEn, LLC facility resulting in contaminant releases to the environment in violation of Neb. Rev. Stat §81-1506, Title 118 - Groundwater Quality Standards and Use Classification, and Title 126 - Rules and Regulations Pertaining to the Management of Water. This determination is based on the following information:

- Solid waste consisting of distillers grain containing pesticides has been stockpiled at the facility and land applied on fields surrounding the facility. Storage of treated seed corn has released green chaff to the surface.
- Wastewater containing pesticides has been pumped into the wastewater lagoons and land applied on fields surrounding the facility.
- The wastewater lagoons have damaged liners.
- Groundwater sampling taken on October 12, 2020, and March 26, 2021 from monitoring wells surrounding the onsite lagoons identified the presence of Clothianidin, Mefenoxam, and Thiamethoxam in the groundwater. Stormwater mixed with stockpiled distillers grain has discharged from the facility on more than one occasion. See March 14, 2021, sample results, #20210141812.
- A release from the facility on February 12, 2021 of approximately four million gallons of thin stillage and manure wastewater containing pesticides from an above ground storage tank (NDEE # 021221-NH-0845) discharged to a nearby drainage and impacted surface water and sediments associated with the drainage downstream of the facility.

The NDEE is requiring several activities which require contracting with an environmental consulting firm and a professional geologist (PG) licensed in the



State of Nebraska to oversee the work. Direct Push Technology (DPT) may be utilized for any required subsurface sampling. Please submit to the NDEE the name of the PG who you will utilize and a schedule for the following activities:

Submit a Step 6/Step 7 site assessment work plan under Title 126 – Rules and Regulations Pertaining to the Management of Wastes, Chapter 18 and Title 118 – Groundwater Quality Standards and Use Classification (Appendix A, Step 6, and Attachment A and Step 7, and Attachment B). The work plan should be submitted to the NDEE for review and approval prior to commencing any field work and should include, but not be limited to, the following activities and requirements:

Work plan activities for the lagoons should include, but not be limited to, the following requirements:

- a. Identify all water wells within 2000 feet of the site boundaries.
- b. Sample all drinking water wells within 2000 feet east and southeast of the property boundaries including the facility's water supply wells.
- c. Identify a permanent monitoring well location to establish background levels.
- d. Collect additional groundwater samples to define the horizontal and vertical extent of any groundwater contamination east and southeast of monitoring well MW-4.
- e. Provide a list and justification of analytes to be sampled along with the EPA laboratory method, method detection limit, and practical quantitation limit for each. At a minimum, the list should include the attached list of analytes.
- f. All analysis must be conducted by a laboratory that is certified to test for pesticides.
- g. Provide methods for collecting representative groundwater samples.
- h. Provide a schedule for when the field work will be completed.

Work plan activities for the (1) land application of lagoon water, (2) land application of distillers grain, (3) distillers grain stockpile areas, and (4) onsite and offsite surface water and sediment in the drainage should include, but not be limited to, the following requirements:

- a. Provide a copy of the facility NPDES Best Management Practices plan.

- b. Identify all areas where land application of both wastewater and distillers grain was utilized.
- c. Identify all areas where distillers grain was stockpiled. Identify soil and groundwater sample locations for each stockpile location. The workplan should include depths for soil samples. The number of sample locations should not be less than three samples per stockpile. If waste is still present, sample locations must be in the direction of runoff from the waste. Additional sampling must be performed once the stockpiles are removed.
- d. Identify the amount, type, and rate of wastewater and distillers grain that was applied.
- e. Identify soil and groundwater sample locations for each land application site. Depths should be included for each soil sampling site. The Department would allow the use of incremental sampling methodology/multi-incremental sampling for land application sites.
- f. Identify and sample all water wells within 2000 feet of each land application site (if they are outside the facility boundaries).
- g. Provide a list and justification of analytes to be sampled along with the EPA laboratory method, method detection limit, and practical quantitation limit for each. At a minimum, the list should include the attached list of analytes.
- h. All analysis must be conducted by a laboratory that is certified to test for pesticides.
- i. Provide methods for collecting representative soil and groundwater samples.
- j. Provide a schedule for when the field work will be completed.

The surface water and sediment sampling plan for the drainage should include, but not be limited to, the following requirements:

- a. Identify the extent of the release.
- b. Identify the amount/type of waste released.
- c. Identify sediment sample locations and depths for the entire length of the drainage that was impacted. The number of sample locations should not be determined by locations of where the waste pooled. If waste is still present, it must be removed prior to sampling. The Department would

allow the use of incremental sampling methodology/multi-incremental sampling for sediment sampling.

- d. Sample surface water in the drainage, if present, and sample surface water in the downstream impoundment.
- e. Identify and sample all water wells within 2000 feet of the impacted drainage (if they are outside the facility boundaries).
- f. Provide a list and justification of analytes to be sampled along with the EPA laboratory method, method detection limit, and practical quantitation limit for each. At a minimum, the list should include the attached list of analytes.
- g. All analysis must be conducted by a laboratory that is certified to test for pesticides.
- h. Provide methods for collecting representative soil/sediment samples.
- i. Provide a schedule for when the field work will be completed.

Please provide the name of the PG who will complete the work plans and a proposed schedule by **May 7, 2021**. Submit a singular work plan for all of the activities outlined above for NDEE review by **June 7, 2021**. Be aware that following completion of approved work plan activities, further assessment and/or cleanup under Title 118 or Title 126 may be required.

Please contact Jim Borovich at (402) 471-2223, jim.borovich@nebraska.gov or Hillary Stoll at (402) 471-4252, Hillary.stoll@nebraska.gov with any questions about your plan to move forward. Thank you in advance for your cooperation.

Sincerely



Tom Buell
Monitoring and Remediation Division Administrator

Enclosure

List of Analytes

| Chemical | SD Agricultural Lab Screening Category |
|--|--|
| Abamectin | N/A |
| Acetamiprid | Neonics |
| Azoxystrobin | Strobins |
| Bifenthrin | Permethrins |
| Brassinazole | Azoles |
| Captan | N/A |
| Carbendazim (Thiophanate-methyl degradate) | N/A |
| Carboxin | N/A |
| Chlorantraniliprole | N/A |
| Chloropyrifos (Chloropyrifos-ethyl) | N/A |
| Clothianidin | Neonics |
| Cyfluthrin 1-4 | Permethrins |
| Cyantraniliprole | N/A |
| Cyhalothrin 1-2 | Permethrins |
| Cypermethrin 1-4 | Permethrins |
| Cyproconazole | Azoles |
| Deltamethrin 1-2 | Permethrins |
| Desthio-prothioconazole | Azoles |
| Difenoconazole | Azoles |
| Dimoxystrobin | Strobins |
| Dinotefuran | Neonics |
| Epoxiconazole | Azoles |
| Ethaboxam | N/A |
| Fluconazole | Azoles |
| Fluoxastrobin | Strobins |
| Fludioxonil | N/A |
| Glufosinate | OP |
| Glyphosate | OP |
| Imidacloprid | Neonics |
| Ipconazole | Azoles |
| Isavuconazole | Azoles |
| Itraconazole | Azoles |
| Mancozeb | N/A |
| Metalaxyl | N/A |
| Metalaxyl-M (Mefenoxam) | N/A |
| Metconazole | Azoles |
| Nitenpyram | Neonics |
| Orysastrobin | Strobins |
| Penflufen | N/A |
| Permethrin 1-2 | Permethrins |
| Picoxystrobin | Strobins |
| Posaconazole | Azoles |
| Propiconazole | Azoles |

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|-------------------------------|----------|
| Prothioconazole | Azoles |
| Pyraclostrobin | Strobins |
| Ravuconazole | Azoles |
| Sedaxane | N/A |
| Sulfonic acid prothioconazole | Azoles |
| Tebuconazole | Azoles |
| Tetraconazole | Azoles |
| Thiabendazole | Azoles |
| Thiacloprid | Neonics |
| Thiamethoxam | Neonics |
| Thiram | N/A |
| Thiophanate-methyl | N/A |
| Tolclofos-methyl | N/A |
| Trifloxystrobin | Strobins |
| Uniconazole | Azoles |
| Voriconazole | Azoles |