

INTRADEPARTMENTAL MEMORANDUM

FILE: Stoltenow Compost Site (CO-RI-WA)

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SUBJECT: Permit Application Review

DATE: October 1, 2026

Introduction

The North Dakota Department of Environmental Quality (Department) received a permit application for a modification for the Stoltenow Compost Site.

Schnell Compost currently owns and operates the Stoltenow Compost Site, regulated under Permit CO-RI-WA on approximately 10 acres located in Section 9, Township 131 North, Range 48 West in Richland County, ND. Schnell Compost is proposing to update their current permit-by-rule status to a permitted facility status in order to add composting of food waste. The facility is currently permitted as a permit-by-rule facility for composting grass and leaves. The facility was first permitted in 2016.

Design

The facility can be accessed from the north side or south side of the property on the gravel road, which goes straight back to the composting area. Roads will be cleared and accessible throughout the entire year.

Pen #8 will be utilized for storage and as a staging area for incoming waste from the City of Wahpeton. The incoming waste will be mixed in with cattle manure and various other bulking materials that the feedlot produces. Compost will be lined up in windrows on the north side of the property and used in land application of farm fields.

The site is designed so that any stormwater run-off or leachate will run directly into the lagoon, just east of the feedlot.

A facility site map was included that showed the entire composting operation, feedlot, lagoon, and facility access points.

Operation

The facility will continue to operate in the same manner as before, however, they are proposing to include feedstocks of food waste and putrescible waste to the compost piles, as well as various other compostable items such as yard waste (grass/leaves).

Feedstocks will be stockpiled and mixed with carbon materials and cattle manure generated from the feedlot operation and then spread as a soil amendment on farmer fields. The compostable feedstocks will be placed in windrows that are 10 feet long by 5 feet wide with a 30:1 carbon-to-nitrogen ratio. The piles will be turned at least four times a season to maintain a 150° F temperature.

Water will be added to the piles when the moisture content is too low. The piles will sit and cure for a few months before being applied as a soil amendment. Field applications will be dependent on the soil sample results and will follow the Department's Nutrient Management Plan guidelines.

Closure

The Department will be notified of the facility closure at least 90 to 180 days ahead of time. Within 30 days of notifying the Department, the facility will stop accepting any new incoming waste for composting. Any current materials onsite will either continue the composting process or be removed completely from that area within 90-110 days following the closure notification. Finished compost will be spread on farmer fields and any unprocessed waste will be transported to a landfill that accepts this type of material.

The composting area will be cleaned and decontaminated, with soil sampling being done afterward by an environmental consultant to confirm there is no residual contamination happening in the soils. The area will then be graded. Topsoil will be placed if needed and vegetation will be planted to aid in erosion control. Eventually, the area will return to the original, tillable farmland that was there previously.

The environmental consultant will be used to document the closure, and the documentation and certification will be submitted to the Department within 60 to 90 days of closure completion, as well as any soil sampling, groundwater monitoring, and any other needed documentation.

Compliance History

There have been no compliance issues with the facility, and no formal notices of violations have been issued to the facility since being permitted in 2016.

Solid Waste Management Rules (NDAC Article 33.1-20)

NDAC Section 33.1-20-02.1-05. Record of notice.

A record of notice is not required for composting operations, as there will be no disposal activities at this facility.

NDAC Section 33.1-20-02.1-06. Property rights.

Rocky Stoltenow owns the property and Jay Schnell with Schnell Compost has access to it. A copy of the warranty deed for Rocky Stoltenow and the land lease agreement for Jay Schnell is included in the permit application.

NDAC Section 33.1-20-03.1-01. Preapplication procedures.

A preapplication is not required for a composting site.

NDAC Section 33.1-20-03.1-02. Permit application procedures.

NDAC Subsections 33.1-20-03.1-02(1) – (3)

A permit application including the signed form and supporting documents was submitted and received by the Department.

NDAC Subsection 33.1-20-03.1-02(4)

An affidavit showing proof of the public notice being published twice in the Wahpeton Daily News was included with the permit application.

NDAC Subsection 33.1-20-03.1-02(5)

Notification to the North Dakota Public Service Commission is not required as the facility is not proposing to dispose of coal processing wastes in a mining permit area.

NDAC Subsection 33.1-20-03.1-02(6)

Applications for a solid waste management unit or facility permit must include the following information where applicable:

a. A completed application form, subsection 1;

A permit application including the signed form and supporting documents was submitted and received by the Department.

b. A description of the anticipated physical and chemical characteristics, estimated amounts, and sources of solid waste to be accepted, including the demonstration required by North Dakota Century Code section 23.1-08-14;

The facility currently processes manure from the 965 head capacity beef cattle feedlot on site. Manure amounts vary throughout the year but typically stay between 3,000 to 5,000 tons. Yard waste, mainly consisting of leaves and grass clippings from the City of Wahpeton, ND are mixed with the manure and composted in windrows, which are then applied on surrounding fields. The facility is proposing to add feedstock from food waste, Minn-Dak Farmers Cooperative, Cargill, and possible green waste from surrounding municipalities to the composting operations.

Below is the list of local feedstock producers and waste types:

- Sugar beet pulp, tailings, tare dirt, and hulls from the Minn-Dak Farmers Cooperative in Wahpeton, ND
- Rotten feed, bentonite clay, wastewater, diatomaceous earth, and hulls from Cargill in Wahpeton, ND
- Wheat straw and ash from Masonite Prime Board in Wahpeton, ND
- Food waste from North Dakota State College of Science in Wahpeton, ND and St. Francis Hospital in Breckenridge, MN
- Green waste and biosolids from the cities of Fargo, ND, Wahpeton, ND, and Breckenridge, MN
- Wood waste from Fargo, ND
- Sugar beet pulp, tailings, tare dirt, and wastewater from the American Crystal Sugar Company – Moorhead Factory in Moorhead, MN
- Properly euthanized turkeys and chickens

c. The site characterization of section 33.1-20-13-01 and a demonstration that the site fulfills the location standards of section 33.1-20-04.1-01;

The following maps were included with the permit application:

- Aerial Photos/County Road maps
- Land ownership map
- USGS Topography map
- Soil Survey Map
- NRCS water map
- FEMA map

The above maps adequately depict the facility's site characterization and show that the Department general location standards are met.

d. Soil survey and segregation of suitable plant growth material;

The requirements of this section are not applicable as the facility is a compost site and is not proposing any disposal activities.

e. Demonstrations of capability to fulfill the general facility standards of section 33.1-20-04.1-02;

Jay Schnell is currently the only operator onsite. He has over 25 years of experience in composting operations. Should any future employees be hired, they will be trained in composting techniques, recordkeeping, and equipment use. Operation of composting equipment may include turners, loaders, mixers, and applicators.

An application has been filed by the facility to obtain an NDPDES permit. Stormwater management is addressed in the application as well. The site is designed in a way that all stormwater diverts to the lagoon, located east of the feedlot.

There will be a gated entry with fencing around the perimeter and proper signage will be displayed.

All non-compostable waste will be rejected and taken back to the original waste hauling point. The composting processes may have little contamination. While the facility will reject loads of non-compostable waste, if non-compostable waste is found throughout the composting process, the waste will be separated and disposed of properly or taken back to a landfill.

f. Facility engineering specifications adequate to demonstrate the capability to fulfill performance, design, and construction criteria provided by this article and enumerated in this subdivision;

1) Transfer stations and drop box facilities, section 33.1-20-04.1-06.

The requirements of this section are not applicable as the facility is not proposing a transfer station or a drop box facility.

2) Waste piles, section 33.1-20-04.1-07.

The compost pile will be turned routinely, at least four times during the season, to destroy harmful bacteria, flies, and other insect larvae. The open pile will be covered with carbon materials, such as corn stalks and wood chips to help alleviate odors, contain leachate, and maintain the pile's structure.

Feedlot manure will be hauled once a year and the pens will be leveled, maintained and cleaned in the process.

The nearest neighbor is approximately ½ mile in either direction. For the past 15 years, there have been no odor complaints from the neighbors within that ½ mile range of the compost site.

All feedstocks will be stockpiled in the feedlot area and any leachate from the feedstocks will be contained in the existing wastewater lagoon. There is irrigation equipment on site should the wastewater lagoon overflow.

3) Resource recovery, section 33.1-20-04.1-08.

The requirements of this section are not applicable as the facility is not proposing any resource recovery activities.

4) Land treatment, section 33.1-20-04.1-09 and chapter 33.1-20-09.

The requirements of this section are not applicable as the facility is not proposing a land treatment facility.

5) Non-CCR surface impoundments, section 33.1-20-04.1-09 and chapter 33.1-20-08.1.

The requirements of this section are not applicable as the facility is not proposing any surface impoundments.

6) Any disposal, section 33.1-20-04.1-09.

The requirements of this section are not applicable as the facility is not proposing any disposal activities.

7) Inert waste landfill, chapter 33.1-20-05.1.

The requirements of this section are not applicable as the facility is not proposing an inert waste landfill.

8) Municipal waste landfill, chapter 33.1-20-06.1.

The requirements of this section are not applicable as the facility is not proposing a municipal waste landfill.

9) Industrial waste landfill, chapters 33.1-20-07.1 or 33.1-20-10.

The requirements of this section are not applicable as the facility is not proposing an industrial waste landfill.

10) TENORM waste landfill, chapters 33.1-20-07.1 or 33.1-20-10 and 33.1-20-11

The requirements of this section are not applicable as the facility is not proposing a TENORM waste landfill.

11) Special waste landfill, chapter 33.1-20-07.1;

The requirements of this section are not applicable as the facility is not proposing a special waste landfill.

12) CCR unit, chapter 33.1-20-08;

The requirements of this section are not applicable as the facility is not proposing a CCR unit.

13) Municipal solid waste ash landfills, chapter 33.1-20-10;

The requirements of this section are not applicable as the facility is not proposing a municipal solid waste ash landfill.

14) Regulated infectious waste unit, chapter 33.1-20-12;

The requirements of this section are not applicable as the facility is not proposing a regulated infectious waste unit.

g. The plan of operation of section 33.1-20-04.1-03;

The application included a Plan of Operation which includes the following information:

- **Waste Acceptance/Rejection Procedures:** All non-compostable wastes will be rejected and taken back to the original waste hauling point. The composting process may have a little contamination which the facility will handle. While the facility will reject loads of non-compostable waste, if non-compostable waste is found throughout the composting process, the waste will be separated and disposed of properly or taken back to a landfill.
- **Waste Handling Procedures:** Feedstocks will be stockpiled and mixed with carbon materials and cattle manure generated from the feedlot operation, and then spread as a soil amendment on fields. The compostable feedstocks will be placed in windrows that are 10 feet long by 5 feet wide with a 30:1 carbon-to-nitrogen ratio. The piles will be turned at least four times a season to maintain a 150° F temperature. Water will be added to the piles when the moisture content is too low. The piles will sit and cure for a few months before being applied as a soil amendment. Field application will be dependent on the soil sample results and will follow the Department's Nutrient Management Plan guidelines.
- **Contingency Actions for Fire:** There is a fire protection plan in place and in accordance with the local fire codes. The facility has two spray trailers with 2-inch gas pumps with fire hose attachments including 3,000-gallon and 4,000-gallon capacity hoses. If backup is needed, the City of Great Bend's Volunteer Fire Department is 5 miles away and the Dwight Township's Volunteer Fire Department is 7 miles away.
- **Contingency Actions for Odor:** Compost piles will be covered with carbon materials such as corn stalks and wood chips to help manage odor control, contain leachate, and maintain the pile's structure. The nearest neighbor is approximately ½ mile in either direction. For the past 15 years, there have been no odor complaints from the neighbors.
- **Contingency Actions for Dust:** The facility has access to a large amount of water and the proper watering equipment. Water will be applied to compost windrows and access roads. Calcium chloride may also be added if needed. All speed limits will be followed on the access roads. Incoming trucks and trailers will be properly tarped. Should there be high dust, employees will wear proper protective equipment.
- **Contingency Actions for Failed Stormwater/Leachate Diversion:** The facility will respond immediately and notify the Department, within

24 hours of the release. Operations will cease and the failure will be inspected and documented. The facility will contain the release as they are able with access to proper barriers if needed for diversion. Runoff will be pumped to the feedlot lagoon on site. Dry carbon materials will be used to absorb liquids. The containment infrastructure will be repaired and the monitoring plan will be updated.

- **Safety Procedures:** All employees will be trained on equipment, potential hazards, emergency response, and hygiene. Employees will also know the facility's Emergency Action Plan when responding to contingencies. Site access will be restricted, and only trained personnel will be allowed to enter the working area. All employees will be expected to wear the required personal protective equipment. Equipment operations will follow all speed limits, have back-up alarms and fire extinguishers, and lockouts when being serviced. Appropriate safety data sheets will be available. Storage areas and containers will be properly labeled, and everyone will have access to spill response kits.
- **Operator Training:** Currently, Jay Schnell is the only operator of the composting operation site. He has over 25 years of experience in composting operations. Should any future employees be hired at the facility, they will be properly trained in composting operations, recordkeeping, and equipment use. Equipment operation may include turners, loaders, mixers, and applicators.
- **Facility Inspections:** Daily facility inspections will be done during the compost season. More inspections may be needed during high-risk periods – rain/wet weather, high amounts of incoming waste. Inspection areas will include waste acceptance/handling procedures, composting operations, site conditions, stormwater/leachate conditions, dust/air quality, equipment, controlled access, final compost, and safety/hygiene. Inspections will document who performs them, along with the proper checklist and any associated photos.
- **Recordkeeping and Reporting:** Daily compost monitoring of the stockpile temperature will occur. A 3-foot temperature probe will be used for measuring and the measurement will be recorded daily. The temperature data will be recorded and maintained using a spreadsheet and GPS maps. Soil samples will be taken every three years to determine agronomic loading rates. Soil sample parameters and methods will follow the facility's current approved Nutrient Management Plan and the same fields will be tested. The annual report will be submitted by March 1st and will include the following information: facility information, reporting period, waste types and feedstocks handled, and the quantity of waste processed and composted.

An application has been filed by the facility for an NDPDES permit. The application addresses stormwater management. The site is designed in a way that all stormwater diverts to the lagoon, located east of the feedlot.

h. Demonstration of the treatment technology of section 33.1-20-01.1-12;

The requirements of this section are not applicable as the facility is not proposing to treat waste.

i. The place where the operating record is or will be kept, section 33.1-20-04.1-04;

The operating record will be kept at the residence of Jay Schnell – located on the same parcel of land that houses the composting operations. This will be a part of a Microsoft Excel sheet and notes on Jay's cell phone. All records will be backed up on a personal hard drive.

j. Demonstration of capability to fulfill the groundwater monitoring, sections 33.1-20-08-06 or 33.1-20-13-02;

The requirements of this section are not applicable as the facility is a compost site and groundwater monitoring is not required.

k. Construction quality assurance and quality control;

The requirements of this section are not applicable as the facility is a compost facility, and no disposal activities are proposed.

l. Demonstrations of capability to fulfill the closure standards, section 33.1-20.1-04.1-05 and otherwise provided by this article;

The Department will be notified of the facility closure at least 90 to 180 days ahead of time. Within 30 days of notifying the Department, the facility will stop accepting any new incoming waste for composting. Any current materials onsite will either continue the composting process or be removed completely from that area within 90-110 days following the closure notification. Finished compost will be spread on farmer fields and any unprocessed waste will be transported to a landfill that accepts this type of material.

The composting area will be cleaned and decontaminated, with soil sampling being done afterward by an environmental consultant to confirm there is no residual contamination happening in the soils. The area will then be graded. Topsoil will be placed if needed and vegetation will be planted to aid in erosion control. Eventually, the area will return to the original, tillable farmland that was there previously.

The environmental consultant will be used to document the closure, and the documentation and certification will be submitted to the Department within 60 to 90 days of closure completion, as well as any soil sampling, groundwater monitoring, and any other needed documentation.

- m. Demonstrations of capability to fulfill the postclosure standards, section 33.1-20-04.1-09 and otherwise provided by this article; and**

The requirements of this section are not applicable as the facility is a compost site and postclosure care is not required.

- n. A disclosure statement as required by North Dakota Century Code section 23.1-08-17.**

A disclosure statement that meets the requirements of this section was submitted to the Department as part of the application.

Conclusion

Based on the submitted application and items discussed above, Schnell Compost has shown that application for the Stoltenow Compost Site meets the requirements of the North Dakota Solid Waste Management Rules. It is proposed that the Department grant Schnell Compost a permit with the conditions listed in the draft permit. The proposed permit length is for a period of 5 years because the food composting operation is new.

CRH:DAT:KJF