

Timber Ridge Pork
NPDES Permit – Special Conditions

Special Condition 1

This facility is applying for a renewal NPDES permit. This facility does not discharge, as currently operated and maintained, and is not expected to discharge for the life of this permit.

Special Condition 4

- a. Quantity of livestock wastes will stay within practical limits. All planned application rates abide by these considerations. **(Section 1, pg. 10-12). All planned application rates fall within practical limits.**
- b. **Soil injection is the planned method of application, and this should be sufficient as an odor control method.**
- c. Livestock wastes shall not be applied to land within the following guidelines:
 - i. **Livestock wastes will not be discharged to waters of the state**
 - ii. Livestock waste application shall not be permitted upon land that has been saturated by rainfall within the 24 hour period preceding the time of application. **(Section 1 – pg. 10)**
 - iii. Livestock waste application shall not be permitted on land with ponded water **(Section 1 – pg. 10)**
 - iv. Livestock waste application shall not be permitted on land during precipitation when the land is saturated or when precipitation will produce runoff of livestock waste. **(Section 1 – pg. 10)**
 - v. Livestock wastes shall not be applied to land where the Bray P1 or Mechlich soil test for elemental phosphorous is greater than 300 pounds per acre for the top 7 inches of the soil profile. Livestock wastes may only be applied to land at rates not to exceed the agronomic phosphorous demand for the crops grown in multiple years at the land application site. If livestock wastes are land applied at rates in excess of the agronomic phosphorus demand for the next crop grown, as a multi-year phosphorus application of livestock waste, additional phosphorus shall not be subsequently land applied to that land until either, the applied phosphorus amount has been removed from that land via harvest or crop removal , or phosphorus is needed to meet the agronomic phosphorus demand for the next crop grown. Site specific practices to minimize runoff of phosphorus applied to land in a multi-year phosphorus application must be included as part of the Nutrient Management Plan required in Special Condition 4. Assessment procedures used to determine the site specific practices shall be specified in the Nutrient Management Plan. **(Section 5, as well as no applications are planned on fields with soil tests >300 lbs/acre. In addition, if any applications are needed, these conditions will be adhered to)**
 - vi. Livestock waste shall not be applied within 100 feet of downgradient open subsurface drainage intakes, agricultural drainage wells, sinkholes, waterways or other conduits to surface waters, unless a 35 foot vegetative buffer exists between the land application area and the waterways, open subsurface drainage intakes, agricultural drainage wells, sinkholes or other conduits to surface water. Livestock waste shall not be applied within 200 feet of surface waters. **(Section 8 – field maps with setbacks noted are provided)**
 - vii. Livestock waste shall not be applied to frozen, snow covered or ice covered land if the application of the livestock waste will produce runoff to waters of the State. **(Section 1 – pg. 10)**
 - viii. Livestock waste shall not be applied within 200 feet of potable water supply wells. **(Section 8 – field maps with setbacks noted are provided. All wells are located >200' from field borders. On site verification by application personnel is always recommended to ensure these setbacks.)**

- ix. Livestock waste shall not be applied in a 10-year floodplain unless injected or incorporated in to the soil. **(Section 1 – pg. 10)**
- d. Under all circumstances, the permittee must provide adequate erosion and runoff control to prevent the discharge of livestock waste to waters of the State. **(Section 5 – P Risk Assessment characteristics will be taken into note. Section 15 – Soil Erosion Info – all field are under T, tolerable soil loss limits, and therefore should provide adequate prevention and control such as to prevent a discharge)**
- e. In addition to the provisions specified above, the permittee shall comply with the Nutrient Management Plan to prevent the discharge of livestock waste to waters of the state. The permittee shall implement a Nutrient Management Plan to minimize the entry of stormwater, uncontaminated with livestock waste, into the livestock management facility and livestock waste handling facility. The Nutrient Management Plan is incorporated as a condition of this permit. The Nutrient Management Plan shall be kept of file at the facility for the term of this permit and for five years after expiration of this permit. The Nutrient Management Plan shall include, but is not limited to:
 - i. Site specific conservation practices that limit item 4 (d) – **(Section 5 – P Risk Assessment characteristics will be taken into note. Section 15 – Soil Erosion Info – all field are under T, tolerable soil loss limits, and therefore should provide adequate prevention and control such as to prevent a discharge.)**
 - ii. Practices that provide adequate storage to avoid application of livestock waste to frozen, ice covered or snow covered land, or in the case of application of livestock waste to frozen, ice covered or snow covered land the timing of livestock waste application, application rate of livestock waste, form of livestock waste, method of application, and site specific conservation practices to be implemented. **(Section 2, pg. 4 – this facility has greater than 365 days of storage and so no application to frozen ground is planned. If any applications do become necessary, appropriate provisions for such application are noted in Section 1 – pg. 10)**
 - iii. Practices to inspect, monitor, manage and repair subsurface drainage systems at livestock waste application sites. Inspection of subsurface drainage systems shall include visual inspection prior to and after land application at a land application site to determine failures of subsurface drainage systems that may cause discharges **(Section 1 – pg. 11. No known discharges from subsurface drainage systems are known for this site under current management, and so the provisions noted on this page should be waived)**
 - iv. **This plan meets both LMFA & NRCS standards for a Nutrient Management Plan.**
 - v. The design and construction plans **(none available; facility was built many years ago under a different owner; however, a production map of the area is provided in Section 2)**. And operational and maintenance practice plans that provide for adequate storage capacity for livestock waste for periods when livestock waste cannot be land applied due to weather, cropping, land application site conditions or other conditions so as to maintain compliance with this permit. **(Section 2, pg. 4,6,7. Section 1, pg. 4)**
 - vi. Test methods and sampling protocols for analysis of soil and livestock waste. **(Section 20, pg. 4)**
 - vii. Practices for mortality management **(Section 2, pg. 8-9. This facility utilizes composting. A new composter is scheduled to be built in 2012)**
 - viii. Practices for proper handling, storage, and disposal of chemical waste and other non-livestock wastes **(Section 1, pg. 6)**
 - ix. Practices to prevent direct contact of livestock in the livestock management facility with waters of the State **(Not applicable – all livestock are confined under a roof, and should never come into contact with waters of the State)**

- x. Practices to minimize entry of stormwater uncontaminated with livestock waste into the livestock waste management facility and livestock waste handling facilities (**Section 1 – pg. 6**)
- xi. Records to be kept under this permit to document implementation and management of the Nutrient Management Plan

All records of waste application including:

- ***Date***
- ***Land area utilized***
- ***Rate (gallons per acre)***
- ***Type of application***

Analyses

- ***Manure (yearly)***
- ***Soil tests (every 4 years as noted by the Illinois Agronomy Handbook)***

- f. The permittee shall provide off-site recipients of livestock waste a copy of the laboratory analysis sheet of the most recent nutrient analysis, representative of the livestock waste, that is conducted in accordance with Special Condition 7 (h) and the Nutrient Management Plan identified pursuant to Special Condition 4. The permittee shall keep records of the name, address, off-site location on a topographic map, and acreage of each site used by the off-site recipients of the livestock waste.

Special Condition 5

- a. ***Section 4 – Emergency Action Plan***
- b. i. thru iii. - Notification of discharges to that appropriate authorities is outlined in Section 4

Special Condition 6

This facility is less than 1000 animal units, and therefore, this special condition does not apply; however, a list of best management practices are available in Section 1, pg. 6

Special Condition 7

- a. **A sample annual report is included for reference.**
- b. **This facility does not maintain a National Weather Service rain gauge.**
- c. **The facility maintains a staff gauge with 1 foot increments noted. The facility should keep 2 foot of freeboard at all times to maintain the necessary freeboard for a 25 year/24 hour storm.**
- d. **This facility does not maintain the animal capacity for this provision to apply.**
- e. **Included in the weekly site inspection checklist, as well as subsurface drainage line inspections prior to and immediately after land application (sample included in Recordkeeping, Section 18)**
- f. **Quantity of waste applied will be recorded**
- g. **Will be recorded under application records (sample included in Recordkeeping, Section 18)**
- h. **Livestock waste will be analyzed yearly. They are included under Section 14 – Manure Analyses**
- i. **Dead animals are disposed of in an on-site composter. Number and weight of dead animals are recorded in the farm's production management software**
- j. **Included in the weekly site inspection checklist (sample included in Recordkeeping, Section 18)**
- k. **Included in the daily site inspection checklist (sample included in Recordkeeping, Section 18)**

- l. Section 2, pg. 4**
- m. Section 20, Operation & Maintenance**
- n. Records of nitrogen and phosphorus from manure to be applied to each field due to livestock waste will be maintained by the permittee (Timber Ridge Pork). All other sources of nitrogen and phosphorus applied to fields will be maintained by the land's current tenant.**
- o. Records of nitrogen and phosphorus from manure actually applied to each field due to livestock waste will be maintained by the permittee (Timber Ridge Pork). All other sources of nitrogen and phosphorus applied to fields will be maintained by the land's current tenant.**
- p. Included on the individual checklists**

Additional Information for Plan Reviewers

- This farm is less than 1000 animal units, and therefore, some provisions of the NPDES permit as noted above do not apply.
- The farm does have a two stage lagoon. Nutrients from Stage 1 (Cell A) will be of higher concentration than nutrients from Stage 2 (Cell B). New manure analyses were taken this fall from Stage 1. While they may be higher than what might be expected (especially for Phosphorous), they are the actual facility's analyses, and therefore, are used for planning purposes. Annual analyses will be taken during application, and used to continually figure a running average for use in future planning years.
- This farm does have 3 fields that have >300 lbs/acre phosphorous tests. No manure is planned to be applied to these fields. However, they are included because: they had been used previously, Timber Ridge Pork has the right to spread on them, and they are nearby the facility. At a point in the future when the tests come below 300 lbs/acre, they may again be used for manure application.
- One field does not have a current soil test (Larson's – Malone's). It is not planned for manure application, and is assumed to be >300 lbs/acre. However, soil tests are planned for the future, and if tests prove that the soil test is <300 lbs/acre, manure application would be allowed.
- More manure than what the facility actually produces in a year is planned for application. It is the plan writer's personal experience that swine facilities produce almost twice the amount of manure of indicated by MWPS-18. If manure is not available for application, the facility would simply have less acres applied to or at a lower rate (whichever is more agreeable to the landowner), and future calculations will be altered to reflect the differing applications.