



Redwood County

www.co.redwood.mn.us

Animal Confinement Feedlot Conditional Use Permit Application

Proposed Location of Feedlot Operation:

Permit #: 11-22 Date: _____

Address: 14523 140th St. City: Walnut Grove State: MN Zip: 56180
House # Street Name

Parcel #: _____ Township: Springdale Section: 11 Twp #: T-109-N Range: R-39-W

Information about the Operation:

General description of feedlot operation (including type and number of animal units, barns, and manure storage plan):

Existing: 1,000 Finishing Hogs (300au) 41' x 196' barn w/8' pit. 264 finishing cattle 42' x 252' barn (manure pack). 584 finishing cattle 100' x 285' (manure pack). Feed storage is 61,260sqft. Expanding: 500 finishing cattle 100' x 285' w/12' pit.

Legal Description of Proposed Feedlot Location:

SW1/4 of the SE 1/4 in section 11 of T09N-39W

Site / Plan Information:

Zoning District: Agricultural

Soil Type 1: Webster Clay Loam; 0 to 2 percent slopes

Soil Type 2: Normania Loam; 1 to 3 percent slopes

Water source for the site: Rural Water

Drainage System: Perimeter Tile

Estimated water use:

Animal 1

Animal Type: Feeder Cattle (Stocker or Backgrounding)
 $6.6 \frac{\text{gallons}}{\text{day/animal}} \times 1,348 \text{ number of animals on site} \times 365 \text{ number of days present} = 3,247,332 \frac{\text{gallons}}{\text{yr/site}}$

Animal 2

Animal Type: Swine, between 55 and 300 pounds
 $1.05 \frac{\text{gallons}}{\text{day/animal}} \times 1,000 \text{ number of animals on site} \times 365 \text{ number of days present} = 383,250 \frac{\text{gallons}}{\text{yr/site}}$

Animal 3

Animal Type: _____
 $\text{_____ gallons/day/animal} \times \text{_____ number of animals on site} \times \text{_____ number of days present} = \text{_____ gallons/yr/site}$

Total Gallons: 3,630,582

Proposed Building(s) Information: (Please enter dimensions in feet)

Building 1: Width: 100 Length: 285

Building 3: Width: _____ Length: _____

Building 2: Width: _____ Length: _____

Building 4: Width: _____ Length: _____

Setback from road right-of-way: _____ 0 feet

Setback from center line of road: _____ 0 feet

Estimated date for beginning construction: 10/1/2022 Estimated completion date: 12/1/2022

General Contractor:

Name: Landmark Builders City: Watertown State: SD

Applicant Information:

Note: If the applicant is not one natural person, requested information and signature(s) must be provided for each partner/associate/co-applicant and must include documentation of each co-applicant's legal identity and the legal relationship between them. Each partner/associate/co-applicant must sign or affirm the application before it will be accepted for consideration.

First Name: Michael Last Name: Landuyt

Business Name: Landuyt Land & Livestock

Address: 14523 140th St. City: Walnut Grove State: MN Zip: 56180

Home Phone: _____ Cell Phone: (507) 859-2330 Email: landuytfarm@gmail.com

List any additional applicants:

Land Owner: Complete only if different from Applicant

First Name: _____ Last Name: _____

Business Name: _____

Address: City: _____ State: MN Zip: _____

Home Phone: _____ Cell Phone: _____ Email: _____

If the applicant is not the owner of the land, please specify the type of agreement the applicant has with the owner of the land at the proposed site:

Feedlot Operator: Complete only if different from Applicant

If the operator is not a natural person(s), you must also provide documentation of the operator's legal identity.

First Name: _____ Last Name: _____

Business Name: _____

Address: City: _____ State: MN Zip: _____

Home Phone: _____ Cell Phone: _____ Email: _____

I affirm that the forgoing information is true and accurate. I understand that if any portion of this information is false or materially misleading, any conditional use permit issued in reliance upon this information is voidable at the election of Redwood County.

Applicant(s) Signature(s): _____ Date: _____

Landowner Signature _____ Date: _____

List of Required Documentation: (Application not complete until received)

- MPCA Application
- Manure Spreading Agreements
- Pit Design
- Manure Management Plan

Office Use Only + The section below is to be filled out by the Environmental Office Staff

Permit fee: \$ 700 Receipt #: _____

Application Received: _____

Commission Action: _____ County Board Action: _____

Approved: _____ Date: _____ Approved: _____ Date: _____

Disapproved: _____ Date: _____ Disapproved: _____ Date: _____

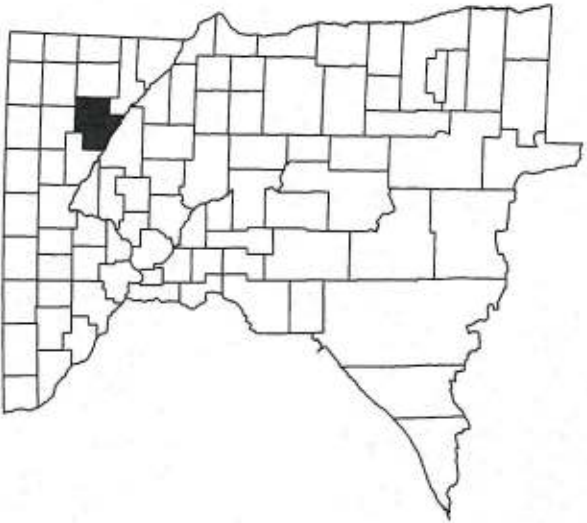
MIKE LANDUYT - 12-FT STEER PIT BARN

ENGINEERED PLAN SHEETS

SEC. 11, Twp. 109N, R. 39W

REDWOOD COUNTY, MINNESOTA

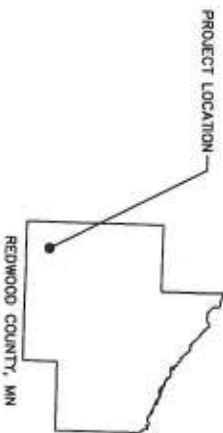
JUNE 15, 2022



MPCA Office: Marshall
MPCA Phone # 507-537-7146

SHEET 1	COVER SHEET
SHEET 2	EXISTING SITE PLAN
SHEET 3	PROPOSED SITE PLAN
SHEET 4	PIT LAYOUT
SHEET 5	DETAILS
SHEET 6	DETAILS
SHEET 7	BORING LOCATION PLAN
SHEET 8	SOIL PROFILES

SHEET INDEX



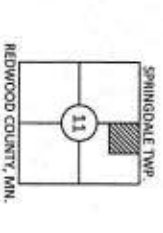
- IT IS THE DUTY OF THE OWNER TO CONTACT MPCA AND/OR CFO:
- 3 DAYS BEFORE ANY CONSTRUCTION BEGINS DATE OF NOTIFICATION: _____
 - 3 DAYS AFTER COMPLETION - BEFORE BACKFILL DATE OF NOTIFICATION: _____
 - NOTIFY ANEZ CONSULTING 24 HOURS PRIOR TO ALL CONCRETE POURS (320) 235-1970



STATE LAW AND NRCS POLICY REQUIRE THAT THE EXCAVATOR CONTACT "GOPHER STATE ONE-CALL" AT 1-800-252-1186 FOR UTILITY LOCATIONS 48-HOURS PRIOR TO THE START OF EXCAVATION WORK.

LEGEND

	TEST PIT LOCATION
	WELL LOCATION
	SUBSURFACE DRAIN TILE
	GRADING LIMITS
	SILT FENCE
	CHECK DAM
	EARTHEN BERM
	INFILTRATION BASIN
	ROAD RIGHT-OF-WAY
	PROPERTY LINES
	PROPOSED GRADING
	PROPOSED SPOT ELEVATION
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PERMANENT OUTLET PROTECTION
	PROPOSED BUILDING



1700 Technology Drive NE
Suite 130
Walker, MN 55221
(202) 235-1970

ANZ CONSULTING

MIKE LANDUYT
12-FT STEER PIT BARN
COVER SHEET
SEC. 11, TWP. 109N, R. 39W
REDWOOD COUNTY, MN.
DATE: JUNE 15, 2022
1 OF 8



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Signature: *Michael J. Moran*
 Michael J. Moran, PE
 Registration No. 26887

Date: JULY 7, 2022
 My Registration Expires June 30, 2023

3705 Technology Drive, NE
 Suite 130
 Minneapolis, MN 55412
 (612) 225-9700

MIKE LANDUYT
 12-FT STEER PIT BARN
 EXISTING SITE PLAN
 SEC. 11, TWP. 109N, R. 38W
 REDWOOD COUNTY, MN

Scale: 1" = 50'
 Date: JUNE 15, 2022
 Sheet Number: 2 OF 8



126 FT. OF 12" HOPE @ 0.4%

SLAT ELEV. — 1175.25

111 102

101

100

99

98

100 Technology Drive NE
Suite 130
Waco, MN 56087
1881 246-1910

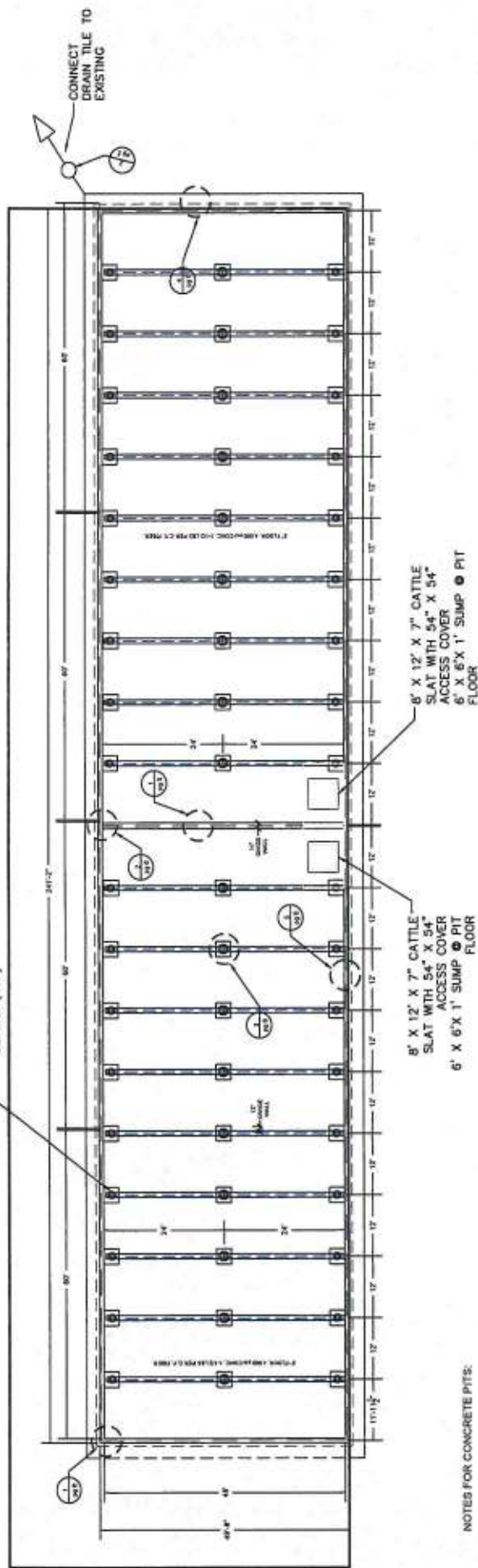
MIKE LANDUYT
12-FT STEER PIT BARN
PROPOSED SITE PLAN
SEC. 11, TWP. 108N, R. 39W
REDWOOD COUNTY, MN.
1" = 50'
Project Number: _____
Date Issued: JUNE 15, 2022
Sheet Number: _____
3 of 8

I hereby certify that this plan, specification or report was prepared by me or my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Michael G. Nelson*
Michael G. Nelson, PE
Registration No. 2467

Date: JULY 7, 2022
My Registration expires June 30, 2023

CONSTRUCT 14 DIA. COLUMN OR PLASTER BEAMS. (TYP)



CONCRETE DETAILS

1. CONCRETE COLUMNS, WALLS, FLOORS, BEAMS, FOOTINGS AND PUMP-OUTS: 4000 PSI MINIMUM 28 DAY STRENGTH.
2. 3"-4" CONCRETE SLUMP HORIZONTAL POURS.
3. 5" MAXIMUM CONCRETE SLUMP VERTICAL POURS.
4. ALL REBAR GRADE 60, UNLESS NOTED.

NOTES FOR CONCRETE PITS:

1. PERIMETER TILE. Pit design is based on use of perimeter tile with gravity outlet or automatic sump pump. Tile shall not be more than 4 ft. from main pit wall. Surface inlets into the perimeter tile are NOT permitted. Do not contaminate the perimeter tile trench.
2. CONSTRUCTION JOINTS are not permitted in the end walls or within 3 ft. of a pumpout. The pumpout floor and footing must be formed and poured along with the main floor.
3. ANCHOR BOLTS shall be set as specified by the building contractor.
4. PRECAST MANUFACTURER shall submit a certification from a registered professional engineer that the precast system will support the live loads specified in Section 03200.
5. HONEYCOMB AND SHRINKAGE CRACKS wider than the thickness of a plastic credit card shall be filled with 48 hours with cement grout slurry mopped into the cracks. Do this before dirt and equipment are brought onto the floor slab.
6. Total Effective Capacity of LMSA Addition Concrete Manure Storage Structure at 10'-6" effective depth:
 - 1,068,772 gal.
 - Total number of Beef Flushing Animals: 505 head
 - MWP's Manure and Wastewater Annual Production Estimate: 600,000 gal.

Storage Provided = 385 days

1700 Technology Drive NE
Suite 130
Wadena, MN 56601
(203) 235-1932

Intez
CONCRETE

MIKE LANDUYT
PIT LAYOUT

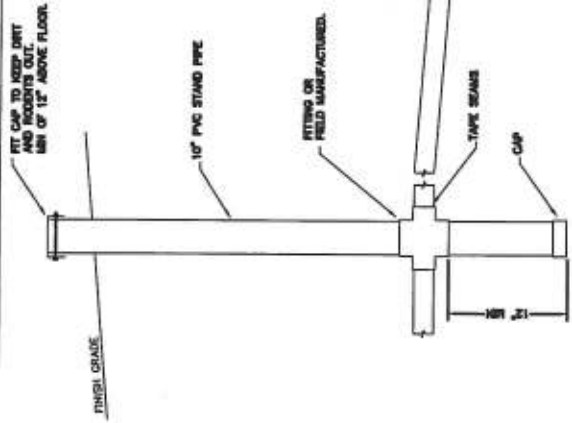
SEC. 11, TWP. 108N, R. 30W
REDWOOD COUNTY, MN

Date: JULY 7, 2022
By: Registration Expires June 30, 2023

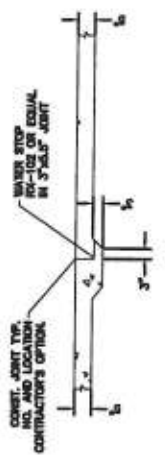
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Signature: *Michael G. Nelson*
Michael G. Nelson, PE
Registration No. 30807

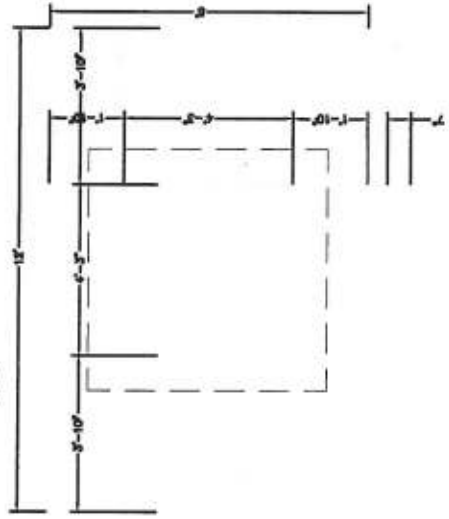
Date: JULY 7, 2022
By: Registration Expires June 30, 2023



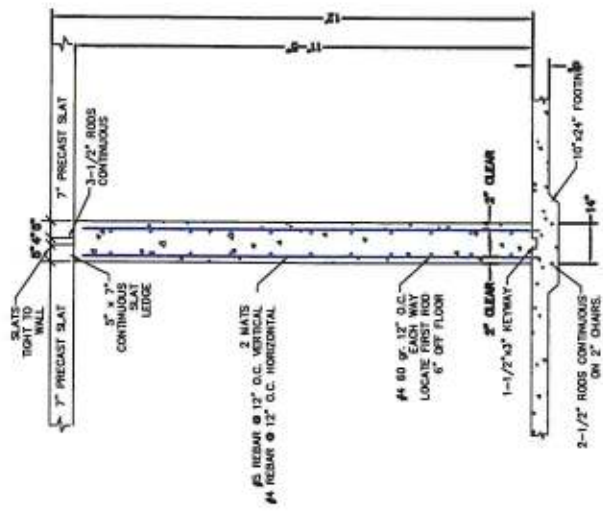
3 FLOOR CONSTRUCTION JOINT
Scale: 1" = 3'



2 DRAINTILE MONITORING PORT
Scale: 1" = 3'



5 SLAT PUMP-OUT DETAIL
Scale: 1" = 3'



1 DIVIDE WALL DETAIL
Scale: 1" = 3'



4 WALL CONSTRUCTION JOINT
Scale: 1" = 3'

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Signature: *Michael G. Hanson*
Michael G. Hanson, PE
Registration No. 24697

Date: JULY 7, 2022
My Registration Expires June 30, 2023

1506 Technology Drive NE
Suite 130
Walker, MN 56291
(507) 266-1170

MIKE LANDUYT
12-FT STEER PIT BARN
DETAILS
SEC. 11, TWP. 109N, R. 35W
REDWOOD COUNTY, MN.
1" = 1"
AIME 10, 2022
Project Number: _____
Sheet Number: 6 of 8



1700 Technology Drive NE
Suite 130
Wauwatosa, WI 53095
608.781.1100

Ames
INCORPORATED

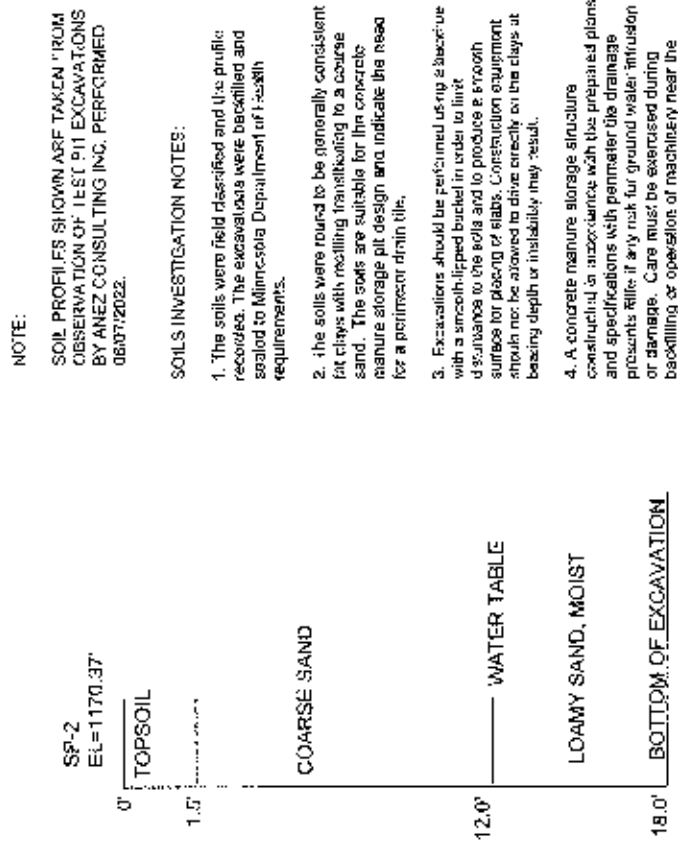
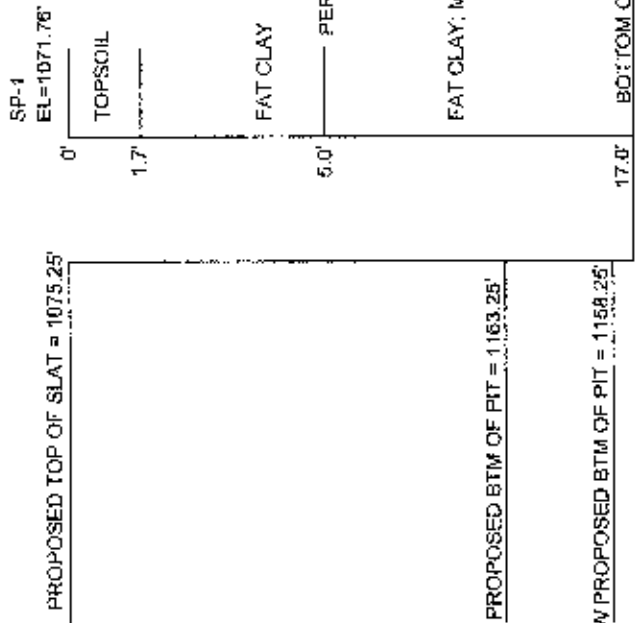
MIKE LANDUYT
12-FT STEER PIT BARN
SOIL PIT LOCATION MAP
SEC. 11, TWP. 109N, R. 38W
REDWOOD COUNTY, MN

Project Number: _____
File Name: _____
Date: _____
Scale: _____
Sheet Number: 7 of 8

I hereby certify that this plan, specification or report was prepared by me, or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Engineer: *Michael G. Nelson*
Michael G. Nelson, P.E.
Registration No. 28857

Date: JULY 7, 2022
My Registration Expires June 30, 2025



NOTE:
SOIL PROFILES SHOWN ARE TAKEN FROM OBSERVATION OF TEST PIT EXCAVATIONS BY ANEZ CONSULTING INC. PERFORMED 06/07/2022.

SOILS INVESTIGATION NOTES:

- The soils were field classified and the profile recorded. The excavations were backfilled and sealed to Minnesota Department of Health requirements.
- The soils were found to be generally consistent fat clays with recycling transitioning to a coarse sand. The soils are suitable for fine concrete manure storage pit design and indicate the need for a perimeter drain tile.
- Excavations should be performed using a backhoe with a smooth-tipped bucket in order to limit disturbance to the soils and to produce a smooth surface for placing of slabs. Construction equipment should not be allowed to drive directly on the clays at bearing depth or instability may result.
- A concrete manure storage structure constructed in accordance with the prepared plans and specifications with perimeter tile drainage presents risks if any risk for ground water infiltration or damage. Care must be exercised during backfilling or operation of machinery near the structure. This grading must be sloped away from the structure to provide surface water drainage.

I hereby certify that the plan, specifications or report was prepared by me or under my direct supervision and am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Signature: *Michael J. Linn*
 MICHAEL J. LINN, P.E.
 PROFESSIONAL ENGINEER
 LICENSE NO. 10000

DATE: JULY 7, 2022
 My Registration Expires June 30, 2025

ANEZ CONSULTING INC.
 200 West-Edge Lane NE
 Wadena, MN 56641
 (218) 234-8200

MIKE LANDUYT
 12-FT STEEP PIT BARN
 SOIL PROFILES

SHEET 11, TWP. 402N R. 39W
 REDWOOD COUNTY, MN.

DATE: JULY 5, 2022
 SCALE: AS SHOWN



Purpose: This *Operation and Maintenance Plan* is incorporated into the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit and made an enforceable part of the permit and submitted to the Minnesota Pollution Control Agency (MCPA).

Facility name: Landuyt Land & Livestock Feedlot registration no.: 127-113657

Owner/Operator name: Michael Landuyt Feedlot permit no.: _____

Liquid Manure Storage Area(s) and Manure Contaminated Runoff Containment Structure(s)

In addition to the Operation and Maintenance (O&M) procedures outlined in the plans and specifications developed for the Liquid Manure Storage Area(s) (LMSA) and/or Manure Contaminated Runoff Containment Structure(s) (MCRCS), the practices identified in the following chart will be employed.

LMSA(s) and/or MCRCS(s) at the facility (list site sketch ID number(s) below) (Group structures with similar O&M practices)	Storage capacity	Design freeboard*	Required O&M (from list below)	Additional O&M practices (choose from list below) (numbers 17 - 24)
<input checked="" type="checkbox"/> Underfloor LMSA (Deep Pit)	(months/days)	(feet)	(required by permit)	(no specific requirements)
List Sketch ID #(s): 1-4,9	12 months	1	1 - 16	21
List Sketch ID #(s):			1 - 16	
<input type="checkbox"/> Outdoor LMSA (basin, tank, etc.)	(months/days)	(feet)	(required by permit)	(no specific requirements)
List Sketch ID #(s):			1 - 16	
List Sketch ID #(s):			1 - 16	
List Sketch ID #(s):			1 - 16	
<input type="checkbox"/> Runoff Containment Structure	(months/storm event)	(feet)	(required by permit)	(no specific requirements)
List Sketch ID #(s):			1 - 16	
List Sketch ID #(s):			1 - 16	

* Freeboard is the volume of a basin only available for use in emergency situations (typically the top one foot of depth). If the depth listed here does not coincide with the design plans and specifications, the correct freeboard will be that which is listed in the design plans and specifications.

Activities required by permit conditions (for those items/structures present at or applicable to the facility)

1. Perform weekly visual inspection of stormwater diversion devices.
2. Perform weekly visual inspections of runoff control structures.
3. Perform weekly visual inspections of devices channeling manure-contaminated runoff to the storage area.
4. Perform weekly visual inspections of all LMSAs/MCRCSs.
5. Perform weekly reading of depth marker level for all LMSAs/MCRCSs collecting precipitation.
6. Maintain design freeboard and operating levels in LMSAs/MCRCSs.
7. Perform monthly examination of the monitoring port or drain tile outlet for water flow and signs of discoloration or odor.
8. Maintain volume in LMSAs/MCRCSs to avoid the need for winter application of manure and be consistent with the manure management plan (MMP).
9. Repair sloughing or settling of earthen embankments (most repairs to liner material need plans and specs from a P.E.).
10. Repair of damage to concrete, lumber, steel, or other construction material used.
11. Divert surface water flow away from and prevent pooling near liquid manure storage areas.
12. Inspect manure handling equipment including hoses and couplings for pump-out periodically for leaks.
13. Routine maintenance of equipment such as valves and pumps
14. Use automatic shut-off devices on continuous pumping equipment.
15. Do not allow the LMSAs/MCRCSs to discharge (unless allowed/exempt by permit conditions).
16. Maintain a fence around at grade or near-grade LMSAs.

Additional facility design, maintenance, and operational practices

(No specific items are required in this section, unless incorporated into the design plans and specifications for the structure.)

17. Use access pads for pump-out equipment to prevent erosion.
18. Use anti-scour practices at pipe outlets to prevent liner damage.
19. Removal of built-up solids from separation screens.
20. Control vegetation around LMSAs by frequent mowing or other practices.
21. Maintain appropriate design volume in LMSAs by controlling sludge build-up.
22. Cleaning out of transfer pipes to prevent sludge build up.
23. Other: _____
24. Other: _____

Solid Manure Storage Areas

In addition to the Operation and Maintenance (O&M) procedures outlined in the plans and specifications developed for the Solid Manure Storage Area(s) the practices identified in the following chart will be employed.

Solid manure storage areas at the facility (list site sketch ID number(s) below) (Group structures with similar O&M practices)	Storage capacity	Quantity stored	Required O&M (from list below)	Additional O&M practices (choose from list below) (numbers 10 - 13)
<input type="checkbox"/> Stockpile (on-site)	(months/days)	(tons)	(required by permit)	(no specific requirements)
List Sketch ID #(s):			1 - 8	
List Sketch ID #(s):			1 - 8	
<input checked="" type="checkbox"/> Manure pack or litter	(months/days)	(tons)	(required by permit)	(no specific requirements)
List Sketch ID #(s): 1, 2	1-6 months	unknown	1 - 8	10
List Sketch ID #(s):			1 - 8	
<input type="checkbox"/> Underfloor Storage	(months/days)	(tons)	(required by permit)	(no specific requirements)
List Sketch ID #(s):			1 - 8	
List Sketch ID #(s):			1 - 8	
<input type="checkbox"/> Manure Compost	(months/days)	(tons)	(required by permit)	(no specific requirements)
List Sketch ID #(s):			1 - 9	

Activities required by permit conditions (for those items/structures present at or applicable to the facility)

- | | |
|--|---|
| 1. Perform weekly visual inspection of stormwater diversion devices | 6. Repair of damage to permanent stockpile/storage pad (if a permanent stockpile/storage pad is required) |
| 2. Perform weekly visual inspections of runoff control structure | 7. Repair of damage to concrete, lumber, steel, or other construction material used |
| 3. Perform weekly visual inspections of devices channeling manure-contaminated runoff to the manure storage or containment structure | 8. Removal of all manure temporarily placed outside of barn/lot during cleanout process within ten days (no more than six times per year) |
| 4. Inspect manure hauling equipment periodically for leaks | 9. Operate the compost site in accordance with Minn. R. 7020.2150 (manure compost sites only) |
| 5. Divert surface water flow away from and prevent pooling near solid manure storage areas | |

Additional facility design, maintenance, and operational practices

(No specific items are required in this section, unless incorporated into the design plans and specifications for the structure.)

- | | |
|--|------------------|
| 10. Routine maintenance of manure handling equipment | 12. Other: _____ |
| 11. Removal of built-up solids from separation screens | 13. Other: _____ |

General Facility Operations

Initial here: _____

by initialing here I indicate that I have read, understand, and agree to the requirements/procedures outlined below. (Initial is required for all facilities using this form.)

- A daily inspection of all water lines, including drinking water or cooling water lines (an equivalent method that incorporates the use of water meters, pressure gages or other monitoring devices is also acceptable)
- Disposal of solid and hazardous waste will be done in accordance with applicable Minnesota Rules
- Animals shall not be allowed to come into contact with waters of the state (except animals on pasture)
- Records of operation and maintenance activities will be kept in accordance with the facility's NPDES/SDS Permit
- Manure storage areas shall be managed and subsequent land application of manure shall be performed in accordance with the approved MMP for the facility.
- For those sites that are required by the MPCA to perform groundwater monitoring, the facility agrees to incorporate the MPCA approved groundwater monitoring plan and/or requirements from the facility's NPDES/SDS Permit into this Operations and Maintenance Plan.

Ancillary Area Stormwater Management

In addition to the Operation and Maintenance (O&M) procedures outlined in the Stormwater Pollution Prevention Plan (SWPPP) developed for the facility (if required) the practices identified in the following chart will be employed to manage stormwater discharges from ancillary areas not included in the definition of the feedlot facility.

Potential Pollutant Transport Areas (not included in the definition of the feedlot facility)	O&M Practices (choose at least one practice from the list below)
<input checked="" type="checkbox"/> Access Roads or Parking Areas used for Transporting Materials To/From Facility	8
<input checked="" type="checkbox"/> Non-Manure Materials Handling Areas (Fertilizer/Pesticide Storage, Bulk Oil/Gasoline Storage, Dry Bale/Bedding Storage, Milk/Egg Storage, Etc.)	8
<input checked="" type="checkbox"/> Garbage/Trash Disposal Sites	8
<input checked="" type="checkbox"/> Equipment Storage and Maintenance Sites	8
<input checked="" type="checkbox"/> Shipping and Receiving Areas	8
<input type="checkbox"/> Truck/Equipment Wash Areas	
<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Other: _____	

Potential Erosion or Sediment Transport Areas (not included in the definition of the feedlot facility)	O&M Practices (choose at least one practice from the list below)
<input checked="" type="checkbox"/> Access Roads or Parking Areas	17,18,21
<input checked="" type="checkbox"/> Roof Water Runoff	17,18,21
<input checked="" type="checkbox"/> Yard Water Runoff	17,18,21
<input type="checkbox"/> "Clean-Water" Tile Intakes	
<input type="checkbox"/> Permanent Stormwater Management Structure Discharge (outlet of stormwater basin, etc)	
<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Other: _____	

Activities for pollutant transport areas

1. Ancillary area has roof/cover to prevent stormwater mingling with pollutants.
2. Divert surface water flow away from and prevent pooling near ancillary areas.
3. Maintain stormwater diversion devices.
4. Perform visual inspections of runoff diversion devices.
5. Repair of damage to concrete, lumber, steel, or other construction material used.
6. Maintain grass buffers/grass waterways at discharge point
7. Handled/Moved off-site.
8. Maintain site cleanliness.
9. Other: _____
10. Other: _____
11. Other: _____

Activities for erosion or sediment transport areas

12. Provide energy dissipation at the end of channelized flow or pipe/gutter, such as rip-rap.
13. Maintain gravel/rock where roof water falls onto soil.
14. Maintain grass buffers/grass waterways at discharge point.
15. Maintain grass buffer around tile intakes.
16. Maintain grass buffers at the edge of roads/parking areas.
17. Keep vegetative cover where possible.
18. Repair rills that develop to minimize scour of sediment.
19. Maintain stormwater diversion devices.
20. Perform visual inspections of erosion prevention measures.
21. Maintain site cleanliness.
22. Other: _____
23. Other: _____
24. Other: _____

Submittal Information

Facility Name: Landuyt Land and Livestock
 Agency Interest ID: 119149
 Permit ID: NEW
 Service Type: Feedlot Permitting - NPDES General Permit Issuance
 Transaction ID: 27453
 Submitted On: 2022-07-11 08:36:52

Permit Application Selection

Does your facility exceed any federal large CAFO thresholds? Yes
 Does your facility discharge to US Waters? No
 Do you want to apply for NPDES Permit? Yes

Application Readiness

Based on your previous answers, you are applying for a NPDES General Permit application.

Are you constructing new or expanding an existing feedlot or manure storage area (MSA)? Yes
 Is the ultimate capacity of the feedlot 500 or more animal units, or will the MSA hold manure produced by 500 or more animal units? Yes
 Acres Disturbed 1.5
 Is the facility Minnesota Agricultural Water Quality Certified? Yes
 Is the feedlot in a non-delegated county? Yes

Acknowledgements

I have notified all government authorities and local zoning authorities about the proposed construction or expansion, in accordance with Minn. R. 7020.2000 subp. 5.

I acknowledge that this application is for a NPDES permit where construction activities will disturb one or more acres of land, and it will also serve as an application for the general Construction Stormwater (CSW) NPDES permit, as referenced in the feedlot NPDES permit, unless a separate application for CSW NPDES permit coverage has been made. I agree to comply with the requirements of the CSW NPDES permit.

I understand that if the MPCA determines the facility does not meet the criteria for coverage under the general permit, this application will be denied and a new application must be submitted.

Feedlot Information

Feedlot Name: Landuyt Land and Livestock
 Physical Address: 14523 140th St
 Walnut Grove MN 56180-5313
 Mailing Address: 14523 140th St
 Walnut Grove MN 56180-5313
 Location Description:

Feedlot Location

Collection Method: Digitized - MPCA online map
 Coordinate System: Lat Long - decimal degrees
 Latitude: 44.25422
 Longitude: -95.50222
 Point of Reference: General Location
 County: Redwood
 Tribal Lands:
 Parcel(s) County and ID:
 Township: 109
 Range: 39W
 Section: 11
 Quarter 160: SE
 Quarter 40: SW
 Quarter 10:
 Quarter 2.5:

Contacts

Contact Name: Michael Landuyt
 Contact Type: Feedlot Contact
 Organization Name: Landuyt Land and Livestock
 Organization Type: Private (Non-Government)
 Address: 14523 140th St
 Walnut Grove MN 56180-5313
 Email: landuytfarm@gmail.com
 Phone: 5073820884

Contact Name:
 Contact Type: Owner
 Organization Name: Landuyt Land and Livestock
 Organization Type: Private (Non-Government)
 Address: 14523 140th St
 Walnut Grove MN 56180-5313
 Email: landuytfarm@gmail.com
 Phone: 5073820884

Contact Name: Michael Landuyt
 Contact Type: Billing Contact
 Organization Name:
 Organization Type:
 Address: 14523 140th St
 Walnut Grove MN 56180
 Email: landuytfarm@gmail.com
 Phone: 5076294955

Prevention Opportunities

You chose not to answer these optional questions.

Animal Holding & Numbers

Animal Holding Areas

Does the facility have pasture access? No
 Are there animal holding areas at this facility? Yes
 Is there a well within 1000 feet? No

Total Confinement Barn	Animal Type	Capacity	Animal Units
Status: Active	Swine 55-300 lbs	1000	300
Structure Name: Finishing Barn			
Length: 196 feet			
Width: 41 feet			
Coordinate System: Lat Long - decimal degrees			
Latitude: 44.25474			
Longitude: -95.50122			
Collection Method: Digitized - MPCA online map			
Reference Point: General Location			

Total Confinement Barn	Animal Type	Capacity	Animal Units
Status: Proposed	Beef Cattle - Slaughter/Stock	500	500
Structure Name: Pit Barn			
Length: 285 feet			
Width: 100 feet			
Coordinate System: Lat Long - decimal degrees			
Latitude: 44.25625			
Longitude: -95.50224			
Collection Method: Digitized - MPCA online map			
Reference Point: General Location			

Total Confinement Barn	Animal Type	Capacity	Animal Units
Status: Active	Beef Cattle - Slaughter/Stock	264	264
Structure Name: Hoop Barn			

Length: 252 feet
Width: 42 feet
Coordinate System: Lat Long - decimal degrees
Latitude: 44.25533
Longitude: -95.5009
Collection Method: Digitized - MPCA online map
Reference Point: General Location

Total Confinement Barn	Animal Type	Capacity	Animal Units
Status: Active	Beef Cattle - Slaughter/Stock	584	584
Structure Name: Monoslope			
Length: 285 feet			
Width: 100 feet			
Coordinate System: Lat Long - decimal degrees			
Latitude: 44.25577			
Longitude: -95.5009			
Collection Method: Digitized - MPCA online map			
Reference Point: General Location			

Total Animal Headcount

Animal Type	Capacity	Units
Beef Cattle - Slaughter/Stock	1348	1348
Swine 55-300 lbs	1000	300
Totals:	2348	1648

Manure Storage Areas

Are there manure storage or treatment areas at this feedlot? Yes
Is there a well within 1000 feet? Yes 310 ft.

LMSA - Concrete
Status: Active
Structure Name: Finishing Barn
Shape: Rectangle
Length: 196 feet
Width: 41 feet
Depth: 8 feet
Volume: 360000 gallons
Coordinate System: Lat Long - decimal degrees
Latitude: 44.25475
Longitude: -95.50095
Collection Method: Digitized - MPCA online map
Reference Point: General Location

LMSA - Concrete
Status: New
Structure Name: Pit Barn
Shape: Rectangle
Length: 241 feet
Width: 48 feet
Depth: 8 feet
Volume: 1068772 gallons
Coordinate System: Lat Long - decimal degrees
Latitude: 44.25628
Longitude: -95.50198
Collection Method: Digitized - MPCA online map
Reference Point: General Location

Feed Storage Areas

Is feed at the facility stored in an outdoor pile or bunker? Yes

Feed Storage Area
Status: Active

Structure Name: Existing Feed Storage
 Shape: Irregular
 Length: 210 feet
 Width: 80 feet
 Surface Area: 14880 square feet
 Coordinate System: Lat Long - decimal degrees
 Latitude: 44.25507
 Longitude: -95.5012
 Collection Method: Digitized - MPCA online map
 Reference Point: General Location

Feed Storage Area
 Status: Proposed
 Structure Name: New Feed Pad
 Shape: Irregular
 Length: 140 feet
 Width: 139 feet
 Surface Area: 18752 square feet
 Coordinate System: Lat Long - decimal degrees
 Latitude: 44.25505
 Longitude: -95.50023
 Collection Method: Digitized - MPCA online map
 Reference Point: General Location

Mortality Management

Are animal mortalities composted in a manner that utilizes manure or litter as a part of the compost material? No

Air Emissions Plan

I will employ the following Air Emissions Plan. (This satisfies the requirements of Minn. Rule 7020.0505 subp4.B (1) Affirmed

List of facility components likely to generate significant odors and methods use to mitigate odors*

Animal holding areas

- Disperse/mix air with tree plantings
- Regular removal of manure
- Promptly clean up any spilled feed
- Use spray oil to reduce dust
- Treatment of escaping air with control technologies
- Higher oil and fat content in feed to reduce dust
- Eliminate manure buildup under gates, feeders, etc.
- Maintain exhaust fans and avoid manure and dust accumulation
- Maintain clean, dry floors to eliminate manure buildup
- I will consult the MPCA to identify changes that can be made to reduce odors

Manure storage areas

- Maintain crust on basin by using organic bedding
- Cover liquid manure storage area with straw
- Cover liquid manure storage area with synthetic cover
- Anaerobic digestion
- Separate solids with settling basin or liquid/solid separator
- Utilize a pit additive to break down solids
- Cover the solid manure stockpile
- Notify neighbors of manure application periods and avoid holidays
- Disperse/mix air with tree plantings
- Add straw or other bedding material to reduce odor/emissions
- Treatment of escaping air with control technologies
- Reduce length of time stockpile is maintained
- Solid manure composting
- I will consult the MPCA to identify changes that can be made to reduce odors

*In the event that continued odor complaints are validated, at least one of the practices identified above will be implemented pursuant to MPCA request/approval

Response to documented exceedances

If ambient air quality monitoring indicates an exceedance of the Hydrogen Sulfide Standard, the applicant will submit a report, at the MPCA's request, that provides documentation that one of the following will control the emissions.

Liquid manure storage areas

- Chemical additions
- Natural crusting
- Straw cover
- Synthetic cover (i.e., HDPE)

Solid manure storage areas

- Synthetic cover
- Frequent manure removal
- Frequent land application
- Incineration

- Treatment of escaping air
- Composting

The report must provide evidence that the technology will control the emissions, indicate when the technology will be installed and fully operational, and indicate what temporary measures will be taken to minimize emissions prior to installation. Alternatives may be approved at the discretion of the MPCA. The measures with the report will be immediately implemented upon MPCA approval.

Sensitive Areas

Is any part of the facility located within 1,000 feet of surface waters or tile intakes?	No
Is any part of the facility located within a delineated flood plain (100 year flood)?	No
Is any part of the facility located within designated shoreland?	No
Are there four or more sinkholes within 1,000 feet of the facility?	No
Is any part of the facility located within 300 feet of a known sinkhole?	No
Is any part of the facility located within 1,000 feet of any of the following types of wells?	No
-a community water supply well,	
-a well serving a public school as defined under Minn.Stat. 120A. 05,	
-a well serving a private school excluding home school sites	
-a well serving a licensed child care center where the well is vulnerable(Minn.R. 4720.5550, subp. 2)	

Environmental Review

Are you only applying for reissuance of an existing permit? (no construction projects, physical alteration, or operational changes to the facility or process)?	No
Are you required to prepare, are you preparing, or have you completed any of the following items for any responsible governmental unit (RGU) other than the MPCA (e.g. City, Township, County, State or Federal Agency) as part of this project? Environmental Assessment Worksheet(EAW), Environmental Impact Statement(EIS), Alternative Urban Area-wide Review(AUAR), Federal Environmental Assessment(EA)	No
Has this project been petitioned for an environmental review?	No
Subp. 2 - Construction or expansion of a nuclear fuel or nuclear waste processing facility?	No
Subp. 3 - Construction of an electric power generating plant and associated facilities designed for or capable of operating at a capacity of 25 megawatts or more but less than 50 megawatts and for which an air permit from MPCA is required?	No
Subp. 4 - Construction of a new or expansion of an existing petroleum refinery?	No
Subp. 5A - Construction of a facility for the conversion of coal, peat, or other biomass sources to a gaseous, liquid, or solid fuel (this includes anaerobic digesters)?	No
Subp. 5B - Construction of a facility for the production of alcohol fuels?	No
Subp. 8A - Construction or expansion of a coal transfer facility?	No
Subp. 8B - Construction or expansion of a hazardous materials transfer facility?	No
Subp. 10A - Construction or expansion of a storage facility for coal?	No
Subp. 10B - Construction of a facility for the storage of hazardous materials?	No
Subp. 10C & Subp. 10D - Expansion of a facility for the storage of hazardous materials?	No
Subp. 10H - Construction or expansion of a facility that will store silica sand?	No
Subp. 13 - Construction or expansion of a paper or pulp processing facility?	No
Subp. 15 - Construction or modification of a stationary source of air emissions resulting in an increase in air emissions or greenhouse gases?	No
Subp. 16 - Construction or expansion of a hazardous waste disposal facility?	No
Subp. 17 - Construction or expansion of a mixed municipal solid waste disposal, transfer, energy recovery, or compost facility?	No
Subp. 18A & Subp. 18B - Expansion, modification or replacement of a municipal sewage collection system?	No
Subp. 18C - Expansion or reconstruction of an existing municipal or domestic wastewater treatment facility?	No
Subp. 18D - Construction of a new municipal or domestic wastewater treatment facility?	No
Subp. 18E - Expansion or modification of an existing industrial process wastewater treatment facility?	No
Subp. 18F - Construction of a new industrial process wastewater treatment facility?	No
Subp. 25 - Incineration of wastes containing Polychlorinated Biphenyls (PCBs)?	No
Subp. 29 - Construction or expansion of an animal feedlot facility?	Yes
Subp. 29.1 - Are you constructing an animal feedlot facility with a capacity of 1,000 animal units or more?	Yes
Subp. 29.2 - Are you expanding an animal feedlot by 1,000 animal units or more?	No
A - Has a previous phase of this project been conducted in the last 3 years?	No
B - Are you planning an expansion or another phase of this project within the next 3 years?	No
C - Do you have other existing facilities or proposed projects that may affect the same geographic area as this project?	No

Facility Monitoring

Is your facility required to perform groundwater, surface water or surface discharge monitoring? No

Manure Management Plan

How much manure do you transfer? None

Attachments

Permit Application Documents:

Attachment Type	File Name	Document Date
Verification of Good Neighbor Notice	Landuyt Farms Notice to the Paper.pdf	5/25/2022
Minnesota Agricultural Water Quality Certificate	Water Quality Certificate.pdf	5/18/2022

Manure Storage Documents:

Attachment Type	File Name	Document Date
Construction Plans and Specifications	X-MN_REDWOOD_LANDUYT_P-1.pdf	7/8/2022
Construction Plans and Specifications	landuyt design.pdf	7/8/2022
Construction Plans and Specifications	Spec and O&M.pdf	7/8/2022

Manure Management Planner Documents:

Attachment Type	File Name	Document Date
Manure Nutrient Test Results	LANDUYT FARMS FINISHER.PDF	5/18/2022
Manure Nutrient Test Results	STOCKPILE-LANDUYT FARMS.PDF	5/18/2022
MN P Index Value Input & Output	P Index_All Fields.pdf	5/18/2022

Other Documents:

Attachment Type	File Name	Document Date
Field Maps	Landuyt Soils Maps.pdf	5/18/2022
Soil Test	Landuyt Farms Soil Tests.pdf	5/18/2022
Field Maps	Landuyt Setback Maps.pdf	5/18/2022
MMP Data File	CY 2023 Inital MMP.xlsx	5/18/2022
Field Maps	Landuyt Field Maps.pdf	5/18/2022
Supporting Application Documents	Landuyt Site Map.pdf	5/18/2022
Emergency Response Plan	Emergency Response.doc	5/18/2022

Certification

I hereby certify that the design, construction, and operation of the facility will be in accordance with this application and plans, specifications, reports, and related communications approved by the MPCA, and in accordance with applicable permit conditions or regulations/standards of the MPCA. I also certify under penalty of law that this document and all attachments were prepared under my direction or supervision and the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The person that signs this application must be one of the following:

- A. For a corporation, a principal executive officer of at least the level of vice president
- B. For a partnership, a general partner
- C. For a sole proprietorship, the proprietor

Name of Signing Party:	Michael Landuyt
Username of Signing Party:	landuytfarm@gmail.com
Challenge Question:	Who is the person you most admire?
Challenge Question Answer:	*****

Certification Date and Time: 7/10/2022 10:28:10 PM

Payment

NPDES General Issuance Application Fee	\$620.00
Environmental Review Fee	\$4,650.00
Total	\$5,270.00

Bank Transaction Confirmation ID: MNPPCA000068751

Manure Storage, Handling, and Testing Information



Facility Name: Landuyt Land & Livestock NPDES or SDS Permit? Yes Permit Number: _____
 Owner/Operator Name: Michael Landuyt Date Last Revised: 5/5/2022 Registration Number: 127-113657

Version 9.01 Last Updated: 1/13/22

Manure Sources	Manure Source #1	Manure Source #2	Manure Source #3	Manure Source #4
Description of Manure Source <small>Group sources with similar nutrient content if they have identical animal type, water usage, feed rations, and manure storage</small>	Finishing Barn	Hoop Barn	Monoslope	Pit Barn
Livestock Information				
Predominate Animal Type <small>(Contributing to Manure Source)</small>	Swine- Grow/Finish (wet/dry feed)	Beef Feeder (High Energy)	Beef Feeder (High Energy)	Beef Feeder (High Energy)
Average Animal Weight	200 lbs	1,000 lbs	1,000 lbs	1,000 lbs
Animal Number	1,000	264	584	500
Length of Time Livestock Spend In Facility	365 days/yr	365 days/yr	365 days/yr	365 days/yr
Additional Animal Type <small>(Contributing to Manure Source)</small>				
Average Animal Weight	lbs	lbs	lbs	lbs
Animal Number	days/yr	days/yr	days/yr	days/yr
Length of Time Livestock Spend In Facility				
Storage Information				
Storage Type	Underfloor Concrete Pit	Manure Pack	Manure Pack	Underfloor Concrete Pit
Capacity	gals	tons	tons	gals
Storage Length	12 months	1 months	1 months	12 months
Application Methods				
Commercial Applicator (Yes/No or Name)	Yes	No	No	No
Spreader Type	Liquid Tanker	Solids Spreader	Solids Spreader	Liquid Tanker
How Volume/Tonnage Determined per Load	Commercial Applicator	Spreader Volume	Spreader Volume	Commercial Applicator
How Application Rate is Calibrated	Commercial Applicator	Acres Covered by One Load	Acres Covered by One Load	Commercial Applicator
Manure Analysis - Existing facilities should use actual manure test results				
Sampling Frequency	Every Year	Every Year	Every Year	Every Year
Sampling Methods	Non-Agitated Composite	Stockpile Composite	Stockpile Composite	Non-Agitated Composite
Date Last Analyzed	11/06/21	09/04/20	09/04/20	
Basis for N, P, & K Values Below	Last Year's Sample	Last Year's Sample	Last Year's Sample	Estimate
Total N - (do not enter lab estimated availability)	55 lbs/1000 gal	14 lbs/ton	14 lbs/ton	29 lbs/1000 gal
Total P ₂ O ₅ - (do not enter lab estimated availability)	15 lbs/1000 gal	15 lbs/ton	15 lbs/ton	18 lbs/1000 gal
Total K ₂ O - (do not enter lab estimated availability)	29 lbs/1000 gal	16 lbs/ton	16 lbs/ton	26 lbs/1000 gal
Annual Generation - Existing facilities should use actual production values				
Total Manure Produced per Year (Estimated)	434,504 gals	1,512 tons	3,344 tons	1,071,220 gals
Total Manure Produced per Year (Actual)	gals	tons	tons	gals
Annual N Produced	23,898 lbs	21,162 lbs	46,812 lbs	31,065 lbs
Annual P ₂ O ₅ Produced	6,518 lbs	22,673 lbs	50,156 lbs	19,282 lbs
Annual K ₂ O Produced	12,601 lbs	24,185 lbs	53,499 lbs	27,852 lbs
Average Book Values				
N	75	11	11	29
P ₂ O ₅	54	7	7	18
K ₂ O	40	11	11	26

wq-16-12

General Field Information (Fields 1-35)

Unique Field ID Attach Aerial Photo or Map With Location Description (twp-rng-sec)	Field Acreage	Sensitive Features (Identify on Aerial Photo or Sketch) ***Insert a check mark by double-clicking the appropriate cells***											Soils Information (Test required once every 4 yrs)			Irrigation?	Anticipated Manure Application Timing NOTE: NFD&S & SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	Winter Application Field Info (If Applicable)						
		Tile Intakes	Drainage Ditch	Lake, River, Stream	Intermittent Stream (if farmed call MPCA)	Wetland (non-farmed)	Coarse-Textured Soil (soil type ends in "sand")	Floodplain	Public Well	Management Area	Shallow Bedrock	Sinkhole	Well, Mine, or Quarry	Other Conduit to Water	Year of Soil Test (red if outdated)			Soil Test Phosphorus (P) Field Average (ppm)	Organic Matter	Distance from Field to Waters	Field Slope (%)			
Example	80	✓														2005	30	Olsen	Med/High	No	Late Fall	800	ft	3%
Across Road	106	✓														2018	25	Olsen	Med/High	No	Spring & Fall			
Bankland	85	✓														2018	25	Olsen	Med/High	No	Spring & Fall			
Brinks	36															2021	21	Olsen	Med/High	No	Spring & Fall			
Hinders North	64															2020	21	Olsen	Med/High	No	Spring & Fall			
Hinders Middle	60															2019	28	Olsen	Med/High	No	Spring & Fall			
Hinders Tracks	9															2021	21	Olsen	Med/High	No	Spring & Fall			
Deals North	62															2019	19	Olsen	Med/High	No	Spring & Fall			
Deals South	74															2020	19	Olsen	Med/High	No	Spring & Fall			
Debs	116	✓														2021	15	Olsen	Med/High	No	Spring & Fall			
Gordons East	16															2019	11	Olsen	Med/High	No	Spring & Fall			
Gordons NW	7															2019	11	Olsen	Med/High	No	Spring & Fall			
Gordons SW	22		✓													2020	12	Olsen	Med/High	No	Spring & Fall			
Home	123		✓													2019	31	Olsen	Med/High	No	Spring & Fall			
James	54	✓														2020	20	Olsen	Med/High	No	Spring & Fall			
Larson	82	✓														2021	17	Olsen	Med/High	No	Spring & Fall			
Mayert North	59															2019	14	Olsen	Med/High	No	Spring & Fall			
Mayert South	107	✓														2020	17	Olsen	Med/High	No	Spring & Fall			
Mayert West	49															2019	26	Olsen	Med/High	No	Spring & Fall			
Holly 17	37	✓														2020	12	Olsen	Med/High	No	Spring & Fall			
South 80	45															2018	12	Olsen	Med/High	No	Spring & Fall			
Old Home	112															2018	15	Olsen	Med/High	No	Spring & Fall			
The 80	71															2020	19	Olsen	Med/High	No	Spring & Fall			
The Half East	78	✓														2021	24	Olsen	Med/High	No	Spring & Fall			
The Half West	106	✓														2020	14	Olsen	Med/High	No	Spring & Fall			
Willies East Qtr	76	✓														2021	16	Olsen	Med/High	No	Spring & Fall			
Willies West Qtr	84	✓														2020	12	Olsen	Med/High	No	Spring & Fall			
Across Road Sensitive	39															2018	25	Olsen	Med/High	No	Spring & Fall			
Bankland Sensitive	27	✓														2018	25	Olsen	Med/High	No	Spring & Fall			
Brinks Sensitive	45															2021	21	Olsen	Med/High	No	Spring & Fall			
Hinders North Sensitive	30															2020	21	Olsen	Med/High	No	Spring & Fall			
Hinders Middle Sensitive	4															2019	28	Olsen	Med/High	No	Spring & Fall			
Deals North Sensitive	10															2019	19	Olsen	Med/High	No	Spring & Fall			
Deals South Sensitive	65															2020	19	Olsen	Med/High	No	Spring & Fall			
Debs Sensitive	18															2021	15	Olsen	Med/High	No	Spring & Fall			
Gordons East Sensitive	2	✓														2019	11	Olsen	Med/High	No	Spring & Fall			

Nutrient Management Info for Methodology Portion of MMP

Nitrogen and Phosphorus Management



Even though no data entry or acknowledgement is required, this information is required as part of a complete MMP and must be followed.

Nitrogen Management - Nitrogen Management - Nitrogen Management

Based on the crop rotation, nutrient application rates will not exceed the nitrogen needs/removal of the crops as derived from the most recent MN Extension Service publications. Note: the most recent publications have been incorporated into this planner (as of September 2021).

Manure application rates will be calculated using the following factors:

- 1) Maximum Nitrogen needs for non-legumes and nitrogen removal for legumes will follow Tables A & C (included as part of planner)
- 2) Manure analysis test results (most recent or historical average)
- 3) Soil test results (where applicable)
- 4) First year nitrogen availability will be based on animal species and method of application as indicated in Table B (included as part of this planner)
- 5) If applicable, credits for previous crops and/or manure applications will be accounted for according to Tables A, B, & C (included as part of this planner)
- 6) If applicable, any fertilizer nitrogen applied will be accounted for in the calculations.

Any deviation from the maximum nitrogen applied will follow the standards allowed in Minn Rule 7020.2225, subp. 3 (A)(2) and the issued permit Additional requirements for NPDES permitted sites to minimize nitrate leaching potential (alternatives may be approved by the MPCA when sufficient justification is provided with the MMP)

- 1) *September manure applications* - a cover crop will be planted
- 2) *October manure applications* - one of the following nitrogen BMPs will be employed for manure applications prior to Oct 15
 - A) Soil temps are less than 50°F at the start of manure application
 - C) Plant a cover crop
 - B) Split application with only 50% of N applied before Oct. 15
 - D) Use a nitrogen stabilizing agent/product at the recommended rate

Phosphorus Management - Phosphorus Management - Phosphorus Management

Phosphorus will be managed for all manure applications according to the following:

Manure application rates will be calculated using the following factors:

- 1) The calculations to determine crop P₂O₅ removal rate will be based on Table C (included as part of this planner)
- 2) For all animal species and all methods of application, the availability factor for phosphorus is 80 percent.
- 3) If applicable, any fertilizer P₂O₅ will be accounted for in the calculations.
- 4) When soil P test levels exceed 75 ppm Bray P1 (60 ppm Olsen) within 300 feet of an open tile intake, lake, stream, intermittent stream, drainage ditch without protective berms, or a public waters wetland, I will follow protocols listed in the issued permit.
- 5) When soil P test levels exceed 150 ppm Bray P1 (120 ppm Olsen) on any land, I will follow protocols listed in the issued permit.
- 6) Where winter-time manure application is approved, phosphorus management will follow rate restrictions listed in the issued permit.
- 7) In addition to items 1-6 I will manage Phosphorus according to one of the following options (either option is acceptable):

A) Minimum Phosphorus Management Based on Minnesota Rules

When the table below indicates soil test levels indicate phosphorus management is required, I will manage the rate and frequency of manure applications to not allow soil P build-up over any 6 year period, as required in the issued permit.

B) Crop Phosphorus Removal Rates (over the rotation)

All manure will be applied according to phosphorus based rates, so that the rate and frequency of P₂O₅ applications will not exceed the expected crop P₂O₅ removal over the course of the crop rotation.

Minimum P₂O₅ Requirements

Bray P-1 (ppm)	Less than 22	22-75	76-150	Greater than 150
Olsen (ppm)	Less than 17	17-60	61-120	Greater than 120
More than 300 feet from waters*	No Phosphorus management requirements	No Phosphorus management requirements	No Phosphorus management requirements	Follow NPDES/SDS permit requirements
Less than 300 feet waters*	No Phosphorus management requirements	Prevent long-term build-up of soil P over a 6-year period (except open tile intakes)	Follow NPDES/SDS permit requirements	Follow NPDES/SDS permit requirements

* waters include: open tile lakes, streams, intermittent streams, protected wetlands, or unbermed drainage ditches

Sensitive Features Management Worksheet



This worksheet identifies all allowable techniques that can be used to provide protection to sensitive features **as required** in Minnesota Rules and/or permit conditions. One of the following measures must be employed for the applicable sensitive feature. Any of the identified practices are acceptable.

Tile Intakes

- Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up
- Option B - Inject or incorporate within 24 hours and prior to rainfall within 300 ft.
- Option C - 35 ft grassed buffer
- Option D - 100 ft setback with at least 16.5 ft as grassed buffer

Drainage Ditches

- Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up
- Option B - 50 ft wide grassed buffer
- Option C - 100 ft setback with at least 16.5 ft as grassed buffer
- Option D - Protective Berm (prohibits runoff from entering the ditch)

Lakes, Rivers, and Streams

- Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up
- Option B - 100 ft wide grassed buffer
- Option C - 100 ft setback with at least 16.5 ft as grassed buffer

Intermittent Streams and/or Public Waters Wetlands (over 10 acres)

- Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up
- Option B - 50 ft wide grassed buffer
- Option C - 100 ft setback with at least 16.5 ft as grassed buffer

Wells, Mines, or Quarry

- Option A - 50 ft setback - minimum (100 ft if NPDES permitted)

Sinkholes

- Option A - Inject or incorporate within 24 hours and prior to rainfall upslope and within 300 ft and observe a 50 ft non-manured setback (100 ft non-manured setback for NPDES)
- Option B - Berm that prevents runoff from entering the sinkhole

Application of Manure During the Summer Months (June, July, and August) - This also includes September for NPDES permitted sites

- Option A - A cover crop will be planted on all fields that receive manure applications during June, July, and August

Other Conduits to Water

- Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up
- Option B - 50 ft wide grassed buffer
- Option C - 100 ft setback with at least 16.5 ft as grassed buffer
- Option D - Protective Berm (prohibits runoff from entering the waters)

Early Fall Land Application - Unless otherwise required, this only applies to early fall manure application at NPDES or SDS permitted facilities

- Option A - Fall Application onto fields that are dominated by coarse-textured soils shall be delayed until soil temperatures in the upper six (6) inches, are less than 50 degrees Fahrenheit, unless otherwise first approved by the MPCA.

Sensitive Features Management Worksheet

Winter Application of Manure at NPDES & SDS Permitted Sites

Winter Application is defined as manure application after November 30 to fields that are either frozen or snow-covered.



<p>Solid Manure Applications - Solid Manure Applications - Solid Manure Applications - Solid Manure Applications</p> <p>NPDES permit requirements for winter applications of solid manure:</p>	<p>1) During the months of December and January Applications must follow all requirements applicable to SDS permitted sites.</p> <p>2) During the month of February Applications must comply with items 1-3 for SDS permits and the following: a) No application when 2+ inches of snowcover and temps 40+°F within 5 days b) No application when 1/4+ inch rainfall is likely within 5 days (50+% chance) c) Only apply manure to areas of the field with slopes less than or equal to 2% 3) During the month of March - application prohibited to frozen or snow covered fields</p>
<p>Solid Manure Applications - Solid Manure Applications - Solid Manure Applications - Solid Manure Applications</p> <p>SDS permit requirements for winter applications of solid manure:</p>	<p>1) No manure application within 300 feet of lakes, streams, intermittent streams, drainage ditches without berms, open tile intakes, wells, wetlands, and sinkholes</p> <p>2) No manure application when ice/water completely fills furrows or depressional areas</p> <p>3) All fields must meet phosphorus loss risk index number of 2 or less Include a copy of the MN P Index* input and outputs to verify the result</p> <p>4) No application when 2+ inches of snowcover and temps 40+°F within 24 hours</p> <p>5) No application when 1/4+ inch rainfall is likely within 24 hours (50+% chance)</p> <p>6) Only apply manure to areas of the field with slopes less than or equal to 6%</p>
<p>Required for SDS and NPDES sites - Indicate why winter application of solid manure is necessary and why other alternatives are not feasible (stockpiling and/or applications during non-winter periods)</p> <p>a) Can not apply all the manure in fall or spring based off time and weather conditions.</p> <p>b) _____</p> <p>c) _____</p> <p>d) _____</p> <p>e) _____</p>	
<p>*The Minnesota Phosphorus Index can be downloaded at the following link: https://www.swac.umn.edu/extension-outreach/phosphorus/iss</p>	

<p>Emergency Liquid Manure Applications - Emergency Liquid Manure Applications - Emergency Liquid Manure Applications</p> <p>Winter application of liquid manure is prohibited by the NPDES & SDS permits except for emergency situations (as defined by the permit)</p> <p>Emergency situations include land application necessary to prevent Manure storage overflows at a site designed, constructed and managed to contain Manure during the winter, and where other options for additional temporary storage are not feasible. Emergencies are considered only those situations that are beyond the control of the permittee, such as unusual weather or unavoidable equipment failure.</p> <p>Identify management alternatives that will be used to prevent and minimize needed emergency liquid applications during the winter (check all that apply)</p> <p><input type="checkbox"/> Transfer manure to other liquid manure storage at the facility.</p> <p><input type="checkbox"/> Transfer manure to other liquid manure storage not at the facility.</p> <p><input checked="" type="checkbox"/> Manure storage area will be pumped in fall to maximize capacity entering the winter season.</p> <p><input type="checkbox"/> Only the minimum amount of manure will be applied to alleviate the emergency situation; remaining manure will be applied after spring thaw.</p> <p><input type="checkbox"/> Other: _____</p> <p>Requirements when emergency liquid applications are necessary (all management alternatives identified above have been exhausted)</p> <p>1) Call both the Minnesota Duty Officer (800-422-0798) and the MPCA within 24 hours of an emergency application</p> <p>2) No manure application within 300 feet of lakes, streams, intermittent streams, drainage ditches without berms, open tile intakes, wells, wetlands, and sinkholes</p> <p>3) Only apply manure to areas of the field with slopes less than or equal to 4%</p> <p>4) Maximum application rate of 3,500 gallons/acre/winter season not to exceed 60 pounds of P2O5/acre/winter season.</p> <p>5) Utilize an application rate that prevents ponding or runoff during the application process.</p>

6 Year Soil Phosphorus Management Plan



When soil phosphorus levels are required to be maintained (or reduced) over a 6 year period, one of the following crop rotation scenarios will be employed for the applicable field or area near sensitive features. You must complete at least one rotation below or indicate that manure will not be applied within 300 feet of sensitive features (this option will only be visible when all soil test results are below 150 Bray or 120 Olsen).

Manure will not be applied within 300 ft of open tile intakes, lakes, streams, intermittent streams, public water wetlands, or drainage ditches without protective berms.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8
Crop (Year 1)	Corn	Corn	Corn	Corn Silage				
Yield	220 bu	220 bu	220 bu	27 ton				
Manure Application Source (1-12) & Rate	1 3000 gals	2 10 tons	3 10 tons	4 10000 gals				
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				
Crop (Year 2)	Soybeans	Soybeans	Soybeans	Soybeans				
Yield	65 bu	65 bu	65 bu	65 bu				
Manure Application Source (1-12) & Rate								
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				
Crop (Year 3)	Corn	Corn	Corn	Corn Silage				
Yield	220 bu	220 bu	220 bu	27 ton				
Manure Application Source (1-12) & Rate	1 2000 gals	2 10 tons	3 10 tons	4 10000 gals				
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				
Crop (Year 4)	Soybeans	Soybeans	Soybeans	Soybeans				
Yield	65 bu	65 bu	65 bu	65 bu				
Manure Application Source (1-12) & Rate								
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				
Crop (Year 5)	Corn	Corn	Corn	Corn Silage				
Yield	220 bu	220 bu	220 bu	27 ton				
Manure Application Source (1-12) & Rate	1 2000 gals	2 10 tons	3 10 tons	4 10000 gals				
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				
Crop (Year 6)	Soybeans	Soybeans	Soybeans	Soybeans				
Yield	65 bu	65 bu	65 bu	65 bu				
Manure Application Source (1-12) & Rate								
2 nd Manure Application								
Fertilizer P (total)	lbs	lbs	lbs	lbs				

Results

P Applied over 6 Yrs	84 lbs	360 lbs	360 lbs	432 lbs	lbs	lbs	lbs	lbs
P Removed over 6 Yrs	384.3 lbs	384.3 lbs	384.3 lbs	467.7 lbs	lbs	lbs	lbs	lbs
Will Rotation Build Soil Phosphorus Levels?	No	No	No	No				

Nutrient Application Planning Worksheet (Fields 1-25)



Manure Source Summary

Source 1: Finishing Barn (55-15-29) Source 2: Hoop Barn (14-15-16) Source 3: Monoslope (14-15-16) Source 4: Pit Barn (29-18-26)	Source 5: Source 6: Source 7: Source 8:
Source 9: Source 10: Source 11: Source 12:	

I will transfer ownership of some of the manure.

Field ID	Field Information Summary		Crops Grown Summary		Nutrients Needed to Meet Yield Goal (lb/acre)			Manure Application Information (Nutrients for the 2023 Crop) <small>Application Typically 9/1/2022 to 8/31/2023</small>				Nitrogen (lb N/acre)		Phosphorus (lb P ₂ O ₅ /acre)				
	Acres After Setbacks	2023 Crop	2022 Crop	Crop Most Recently Harvested	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure Source (1-12)	Method of Application and Incorporation <small>NPDES/SDS permitted sites cannot apply liquid manure in the winter (unless emergency)</small>	Acres Receiving Manure <small>(reduce to split the field)</small>	Calculated Max Rate based on Nitrogen	Planned Rate max used if blank	N from Manure (Available this year)	Total Fertilizer Application (lbs/acre)	Excess Available N (negative for deficiency)	P from Manure (Available this year)	Total Fertilizer Application (lbs/acre)	P in Excess of Removal (negative for deficiency)
Across Road	106	Soybeans	Corn	Corn	150	228	0	1		85	3,896		150		-228	47		-53
Bankland	85	Corn	Soybeans	Soybeans	150	228	0	3		64	43	10	35		-228	120		-28
Brinks	36	Soybeans	Corn	Corn	150	228	0	3		64	43	10	35		-228	120		-53
Hinders North	64	Corn	Soybeans	Soybeans	150	228	0	3		64	43	10	35		-228	120		-53
Hinders Middle	60	Soybeans	Corn	Corn	150	228	0	3		64	43	10	35		-228	120		-53
Hinders Tracks	9	Soybeans	Corn	Corn	150	228	0	3		64	43	10	35		-228	120		-53
Deals North	62	Corn	Corn	Corn	195	228	0	3		64	43	10	35		-228	120		-75
Deals South	74	Corn	Soybeans	Soybeans	150	228	0	4		74	10,345		150		-15	149		74
Debs	116	Soybeans	Corn	Corn	228	228	5	4		74	10,345		150		0	149		74
Gordons East	16	Soybeans	Corn	Corn	228	228	34	4		74	10,345		150		-228	149		-53
Gordons NW	7	Soybeans	Corn	Corn	228	228	34	4		74	10,345		150		-228	149		-53
Gordons SW	22	Corn	Soybeans	Soybeans	150	228	38	3		22	43	10	35		-228	120		-53
Home	123	Soybeans	Corn	Corn	228	228	0	3		22	43	10	35		-115	120		45
Janes	54	Soybeans	Corn	Corn	228	228	0	3		22	43	10	35		-228	120		-53
Larson	82	Soybeans	Corn	Corn	228	228	0	3		22	43	10	35		-228	120		-53
Mayert North	59	Soybeans	Corn	Corn	228	228	13	3		22	43	10	35		-228	120		-53
Mayert South	107	Corn	Soybeans	Soybeans	150	228	0	3		22	43	10	35		-228	120		-53
Mayert West	49	Soybeans	Corn	Corn	228	228	0	3		22	43	10	35		-228	120		-53
Holly 17	37	Corn	Soybeans	Soybeans	150	228	38	2		112	43	10	35		-1	149.2		-75
South 80	45	Corn	Soybeans	Soybeans	150	228	38	2		112	43	10	35		-1	149.2		-75
Old Home	112	Corn	Soybeans	Soybeans	150	228	9	2		112	43	10	35		-1	149.2		-75
The 80	71	Soybeans	Corn	Corn	228	228	0	2		112	43	10	35		-115	120		45
The Half East	78	Soybeans	Corn	Corn	228	228	0	2		112	43	10	35		-228	120		-53
The Half West	106	Corn	Soybeans	Soybeans	150	228	18	3		106	43	10	35		-228	120		-53
Willies East Qtr	76	Soybeans	Corn	Corn	228	228	0	3		106	43	10	35		-115	120		45

Nutrient Application Planning Worksheet (Fields 26-50)

Field Information Summary		Crops Grown Summary		Nutrients Needed to Meet Yield Goal (lb/acre)			Manure Application Information (Nutrients for the 2023 Crop)				Nitrogen (lb N/ac)		Phosphorus (lb P ₂ O ₅ /ac)			
		Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure Source (1-12)	Method of Application and Incorporation	Acres Receiving Manure	Application Rate (gals/tons per acre)	N from Manure (Available this year)	Total Fertilizer Application (lbs/acre)	P from Manure (Available this year)	Total Fertilizer Application (lbs/acre)	P In Excess of Removal (negative for deficiency)	
Field ID	Acres After Setbacks	2023 Crop	2022 Crop					NPDES/SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	(reduce to split the field)	Calculated Max Rate based on Nitrogen	Planned Rate max used # blank					
Willies West Qtr	84	Corn	Soybeans	150	---	38										
Across Road Sensitive	39	Soybeans	Corn	---	228	0										
Bankland Sensitive	27	Corn	Soybeans	150	---	0	1		27	3,896		150	47			
Brinks Sensitive	45	Soybeans	Corn	---	228	0										
Hinders North Sensitive	30	Corn	Soybeans	150	---	0	2		30	43	10	35	120			
Hinders Middle Sensitive	4	Soybeans	Corn	---	228	0										
Deals North Sensitive	10	Corn	Corn	195	---	0										
Deals South Sensitive	65	Corn	Soybeans	150	---	0	4		30	10,345		150	149			
Debs Sensitive	18	Soybeans	Corn	---	228	5										
Gordons East Sensitive	2	Soybeans	Corn	---	228	34										
Gordons NW Sensitive	34	Soybeans	Corn	---	228	34										
Gordons SW Sensitive	23	Corn	Soybeans	150	---	38	3		23	43	10	35	120			
Home Sensitive	22	Soybeans	Corn	---	228	0										
James Sensitive	17	Soybeans	Corn	---	228	0										
Larson Sensitive	75	Soybeans	Corn	---	228	0										
Mayert North Sensitive	7	Soybeans	Corn	---	228	13										
Mayert South Sensitive	9	Corn	Soybeans	150	---	0										
Mayert West Sensitive	4	Soybeans	Corn	---	228	0										
Holly 17 Sensitive	44	Corn	Soybeans	150	---	38										
South 80 Sensitive	3	Corn	Soybeans	150	---	38										
Old Home Sensitive	41	Corn	Soybeans	150	---	9	2		10	43	10	35	120			
The 80 Sensitive	5	Soybeans	Corn	---	228	0										
The Half East Sensitive	32	Soybeans	Corn	---	228	0										
The Half West Sensitive	82	Corn	Soybeans	150	---	18	3		82	43	10	35	120			
Willies East Qtr Sensitive	42	Soybeans	Corn	---	228	0										

Total Acres (Fields 1 - 50) = 2,420

I will transfer ownership of the remaining amount of manure.

Source	Amount Applied	Amount Remaining	Acres Applied
Source 1:	434,504	0	112
Source 2:	1,512	0	152
Source 3:	3,344	0	335
Source 4:	1,071,220	0	104
Source 5:	---	---	---
Source 6:	---	---	---
Source 7:	---	---	---
Source 8:	---	---	---
Source 9:	---	---	---
Source 10:	---	---	---
Source 11:	---	---	---
Source 12:	---	---	---

Animal Mortality Management Worksheet



The Minnesota Board of Animal Health (BAH) regulates animal mortality management; however, discharge/emissions from an animal mortality management area is subject to discharge/emission standards administered by the MPCA.

The following best management practices (BMP)s should be employed to assist in compliance with both BAH and MPCA requirements.

<p>Rendering</p> <p>Carcass pick-up point BMPs</p> <ul style="list-style-type: none">Kept in an animal-proof, enclosed area.At least 200 yards from a neighbor's buildings.Picked up within 72 hours (7 days if refrigerated to less than 45 degrees).
<p>Composting</p> <p>Mortality composting area BMPs</p> <ul style="list-style-type: none">Built on an impervious, weight-bearing pad that is large enough to allow equipment to maneuver. <p>Note: Class V gravel material is not considered to be impervious.</p> <ul style="list-style-type: none">Covered with a roof to prevent excessive moisture on the composting material, but if sawdust or other water-repelling material is used as the bulking agent, a roof may not be necessary.Built of rot-resistant material that is strong enough to withstand the force exerted by equipment.Large enough to handle each day's normal mortality through the endpoint of the composting which consists of a minimum of two (2) heat cycles.
<p>Burial</p> <p>Mortality burial site BMPs</p> <ul style="list-style-type: none">Stay 5 feet above seasonal high water table.Stay 1000 feet away from lakes and 300 feet away from rivers, streams, ditches, etc.Be covered immediately with enough soil to keep scavengers out (three feet is sufficient).Not be placed in sandy or gravelly soil types.Maintain at least 10 feet vertical separation between dead animals and bedrock.
<p>Incineration</p> <p>Incineration BMPs</p> <ul style="list-style-type: none">Capable of producing emissions not to exceed 20 percent opacity.Fitted with an afterburner that maintains flue gases at 1,200 degrees Fahrenheit for at least 0.3 seconds.Ash from the incinerator must be handled in such a manner as to prevent particulate matter from becoming airborne.
<p>Other Method</p> <p>The following operational practices will be implemented (describe the alternative method below)</p>



Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

Air Emissions and Odor Management Plan

NPDES/SDS Permit Program

Feedlot Program

Doc Type: Permit Application

Purpose: This *Air Emissions and Odor Management Plan* is incorporated into the National Pollutant Discharge Elimination System (NPDES)/ State Disposal System (SDS) Permit and made an enforceable part of the permit and submitted to the Minnesota Pollution Control Agency (MCPA).

Facility name: Landuyt Land & Livestock Feedlot registration no. 127-113657
 Owner/Operator name: Michael Landuyt Feedlot permit no. _____

Methods/Practices Used to Minimize Air Emissions and Facility Odor Sources and Anticipated Odor Control Strategies

Choose at least one option for each emission source at the facility (Minn. R. 7020.0505, subp 4.B(1)(a) & (c))

ID #	Site sketch identification number (from permit application) and List of air emissions/Odor source(s) Type of Air Emission/Odor Source	Practices employed to minimize emissions List number(s) from below	Complaint response protocol	
			Odor potential (Without BMPs*) High, Med, or Low	Anticipated odor control strategies** List number(s) from below
1	Total Confinement Barn with Underfloor Pit	3,6-9	Low	1,18
2	Total Confinement Barn with Underfloor Pit	3,6-9	Low	1,18
3	Total Confinement Barn	3,8,9,21,24	Med	1,18
4	Total Confinement Barn	3,8,9,21,24	Med	1,18
5				
6	Manure Stockpile	24	Low	1,18
7	Dead Animal Handling Area	2,13		1,18
8				
9				
10				
11				
12				
13				
14				
15				

*BMP = Best Management Practices

** In the event that odor complaints are received and validated by the MPCA/County Feedlot Officer (CFO), the facility/ownership agrees to implement the identified practices identified in this column, pursuant to MPCA request/approval.

Practices applicable to multiple odor/emissions sources

1. Develop a neighbor relations plan
2. Disperse/mix air with tree plantings
3. Establish adequate separation distances
4. Treatment of escaping air with control technologies
5. Reduce nutrient waste with diet manipulation

Animal holding area(s) specific

6. Maintain clean, dry floors to eliminate manure buildup
7. Eliminate manure buildup under gates, feeders, etc.
8. Promptly clean up any spilled feed
9. Reduce feed waste/water losses
10. Maintain exhaust fans and avoid manure and dust accumulation
11. Use spray oil to reduce dust
12. Higher oil and fat content in feed to reduce dust

Dead animal holding/processing area(s) specific

13. Manage mortalities as required by MN Board of Animal Health
14. Compost/manage mortalities in an enclosed structure
15. Use enclosed and refrigerated dead animal holding area

Solid and Liquid Manure Storage Area(s) Specific

16. Maintain crust on basin by switching to organic bedding
17. Cover liquid manure storage area with straw
18. Notify neighbors of manure agitation periods and avoid holidays
19. Cover liquid manure storage area with synthetic cover
20. Addition of chemicals to manure to reduce odor/emissions
21. Add straw or other bedding material to reduce odor/ emissions
22. Separate solids with settling basin or liquid/solid separator
23. Anaerobic digestion
24. Reduce length of time stockpile/manure pack is maintained
25. Solid manure composting
26. Cover the solid manure stockpile
27. Incinerate solid manure at approved/permitted facility

Other practices

28. I will consult the MPCA/CFO to identify changes that can be made to reduce odors following complaints
(*anticipated odor control strategies column only*)

29. Other: _____
 30. Other: _____

Response to Documented Exceedance(s)

(Minn. R. 7020.0505, subp 4.B(1)(b))

Initial here: _____,

by initialing here I indicate that I have read, understand, and agree to the requirements/procedures outlined below. (initial is required for all facilities using this form)

In the event testing/monitoring conducted by the MPCA/County identify emissions in excess of standards set in applicable Minnesota Rules, Statutes, or other directives, the facility/ownership agrees to submit a plan of action following MPCA's request, which provides technical documentation that one (or more) of the following technologies will effectively control emissions in the short term as well as into the future:

Liquid Manure Storage Areas (LMSA)

- Chemical additions to the LMSA
- Maintain natural crusting (blow straw to promote crusting if necessary)
- Maintain a straw cover
- Permeable synthetic cover (floating geo-textile, etc.)
- Impermeable synthetic cover (floating High Density Polyethylene [HDPE], etc.)
- Anaerobic digester
- Treatment of escaping air with odor control technologies

Solid Manure Storage Areas

- Cover manure stockpiles with synthetic covers
- Remove manure packs more frequently
- Eliminate stockpiling by more frequent land application
- Incinerate solid manure for electricity
- Composting solid manure

Animal Holding Areas

- Utilize bio-filters or other odor control technology for power ventilated buildings
- Decrease the amount of manure buildup in the animal holding areas

Dead Animal Handling/Processing Areas

- Utilize enclosed and refrigerated dead animal holding area prior to rendering pick-up
- Animal mortality composting

The MPCA will, at its discretion, consider alternatives to the technologies listed above provided proper technical documentation is submitted that illustrates the alternative will undoubtedly minimize the emissions. The MPCA reserves the right to disapprove of the alternative if the MPCA deems the technical documentation incomplete or inaccurate or if the MPCA deems the alternative unsuitable for the unique circumstances at the facility.

The plan of action must identify when the technology will be installed and fully operational and should also identify what temporary measures can be taken to minimize emissions in the event the chosen technology will take a significant amount of time to install and make fully operational. The plan of action will be immediately implemented following approval by the MPCA and become part of this air emission and odor management plan and subsequently an enforceable part of the facility's NPDES/SDS Permit.



Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

Animal Mortality Plan

NPDES/SDS Permit Program

Feedlot Program

Doc Type: Permit Application

Purpose: This *Animal Mortality Plan* is for handling dead animals in accordance with State requirements, including Minn. Stat. § 35.82 and Minn. R. chs. 1719.0100 to 1719.4600 and 7011.1215. This plan is incorporated into the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit and submitted to the Minnesota Pollution Control Agency (MPCA).

Facility name: Landuyt Land & Livestock Feedlot registration no. 127-113657

Owner/Operator name: Michael Landuyt Feedlot permit no. _____

Planned method of animal disposal: Complete the table below by identifying the animal type, the primary method and the secondary method of disposal of dead animals at your feedlot. The legal methods of disposal are listed below and the minimum requirements for each management option are described on the following page. Please make sure the locations of burial sites, incinerators, temporary mortality storage, and/or compost areas are indicated on the site sketch of your facility included with the NPDES/SDS Permit application.

Catastrophic loss: A catastrophic event such as a fire, collapse, tornado, floods or loss of power that results in a mass amount of animal mortalities shall be reported within 24 hours after the event started. Notifications should include the Minnesota Department of Public Safety Duty Officer at 800-422-0798 and the MPCA.

Animal type	Primary method	Secondary method	Catastrophic loss
Feeder Cattle (Stocker or Backgrounding)	Render	Bury	Minnesota Duty Officer: 1-800-422-0798
Finishg Swine 55-300lbs	Render	Bury	

Check here: By checking here, I indicated that I have read and understand the minimum requirements listed on the second page of this form for the dead animal disposal options identified above for my operation. I agree to adhere to and follow the minimum requirements for the proper disposal of dead animals.

Legal Methods of Disposal

Species	Method				Exempt by Law
	Bury	Incinerate	Render	Compost	
Poultry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Swine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cattle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>
Horses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>
Sheep/Goats	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Household pets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wild animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Game farm/Exotic animals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *	<input type="checkbox"/>

*If composting cattle, horses, or game/exotic animals, contact the Minnesota Board of Animal Health at 651-296-2942 or 800-627-3529.

Animal carcasses should be disposed of as soon as possible, within 48-72 hours. Any vehicles transporting carcasses must be leak proof, covered, inspected, and permitted by the Minnesota Board of Animal Health (If owner is transporting his own dead animals a permit is not required).

Bury

Operators choosing to bury animals must select sites very carefully due to the high risk of ground-water contamination. Buried carcasses must:

- Stay five (5) feet above seasonal high water table.
- Stay 1000' away from lakes and 300' away from rivers, streams, ditches, etc.
- Be covered immediately with enough soil to keep scavengers out (Minnesota Board of Animal Health guidelines indicate three (3) feet is sufficient).
- Not be placed in sandy or gravelly soil types.
- Maintain at least ten (10) feet vertical separation between dead animals and bedrock.

Compost

The composting process must, at a minimum, meet the following:

- The owner of the compost facility shall have a written protocol for the operation containing at least the minimum steps listed below and instructing all employees to follow the protocol.
- Mortalities must be processed daily.
- A base of litter is required. The carcasses or discarded animal parts and litter plus bulking agent are added in layers so that the carbon to nitrogen ratio is in the range of 15:1 to 35:1 (optimal 23:1).
- The carcasses or discarded animal parts must be kept six (6) inches from the edges and sealed with litter each day.
- The temperature must be taken and recorded on site daily. The compost temperature must reach a minimum of 130 degrees Fahrenheit. Approximately seven (7) to ten (10) days are needed in each heat cycle to process the carcasses and kill the pathogens. The temperature drop indicates the time to mix and move the compost. A minimum of two (2) heat cycles is required.
- The finished compost must not contain visible pieces of soft tissue and must be handled, stored, and used according to all other applicable rules.

In addition, composting facilities must be:

- Built on an impervious*, weight-bearing pad that is large enough to allow equipment to maneuver.
- Covered with a roof to prevent excessive moisture on the composting material, but if sawdust or other water-repelling material is used as the bulking agent, a roof may not be necessary.
- Built of rot-resistant material that is strong enough to withstand the force exerted by equipment.
- Large enough to handle each day's normal mortality through the endpoint of the composting which consists of a minimum of two (2) heat cycles.

Incinerate

Incinerator must be:

- Capable of producing emissions not to exceed 20 percent opacity.
- Fitted with an afterburner that maintains flue gases at 1,200 degrees Fahrenheit for at least 0.3 seconds.
- Ash from the incinerator must be handled in such a manner as to prevent particulate matter from becoming airborne.

In addition, it is recommended that the incinerator is large enough to handle each day's mortalities.

Render

Carcasses left at an off-site pickup point must be:

- Kept in an animal-proof, enclosed area.
- At least 200 yards from a neighbor's buildings.
- Picked up within 72 hours.
- If the enclosed area is refrigerated to less than 45 degrees Fahrenheit, the carcasses must be picked up within seven (7) days.

Alternative methods

Alternative methods of mortality disposal including, but not limited to, pet food processing, fur farm consumption, lactic fermentation, extrusion, and experimental composting, require a permit from the Minnesota Board of Animal Health. For more information on alternative methods of carcass disposal, contact the Board of Animal Health at 651-296-2942.

*For the purpose of compost pad construction, Class V gravel material is not considered to be impervious.

OFFSET Summary and Results

Farm Name: Mike Landuyt
 County: to Boerboom
 Evaluator: NWB
 Date: 8/19/22

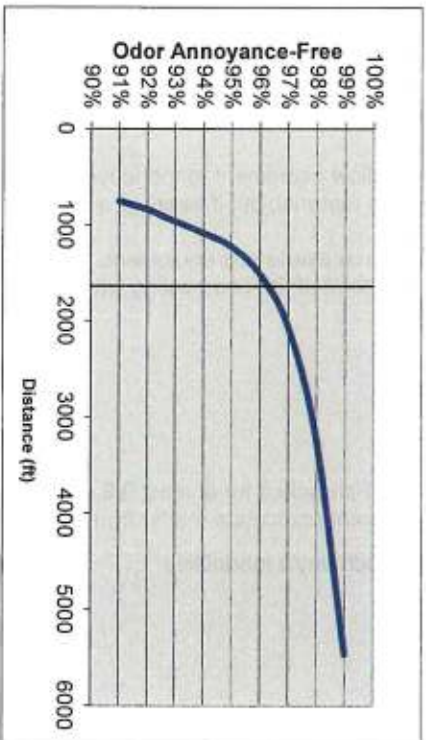


Source Characteristics Summary

Buildings	Similar Sources	Emit Area sq ft	Control Technology Type	Percent Treated	Flux Rates (with control technology)			Source Emission Rates*			
					Odor outs/m2	OFFSET OER	H2S ugls/m2	Ammonia ugls/m2	Odor outs	H2S ugls	Ammonia ugls
Swine Finishing - deep pit	1	8036	None	0%	10.5	34.2	6.0	99.0	7843	4482	73948
Beef - loose housing	1	10584	None	0%	1.2	6	1.7	25.0	1210	1672	24595
Beef - loose housing	1	28500	None	0%	1.2	6	1.7	25.0	3298	4503	66227
Beef - loose housing	1	29500	None	0%	1.2	6	1.7	25.0	3373	4661	68551
Area Sources											
Earthen manure storage		0	None		14.0	13	25.3	107.0	0	0	0
User added		0	None		0.0	0.0	0.0	0.0	0	0	0

*Includes control technologies

Site Emissions	
Total Site Area (ft ²)	76,620
Total Odor Emission Factor (TOEF)	69
Total Site H2S Emissions (mg/s)	15
Total Site H2S Emission AVERAGE (lbs/day)	3
Total Site H2S Emission MAX (lbs/day)	6
Total Site H2S Emissions (tons/yr)	1
Total Site Ammonia Emissions (mg/s)	233
Total Site Ammonia Emission AVERAGE (lbs/day)	44
Total Site Ammonia Emissions MAX (lbs/day)	89
Total Site Ammonia Emissions (tons/yr)	8
Source Edge to Nearest Neighbor (ft)	1640
OFFSET Annoyance-free frequency	96%



OFFSET Summary and Results

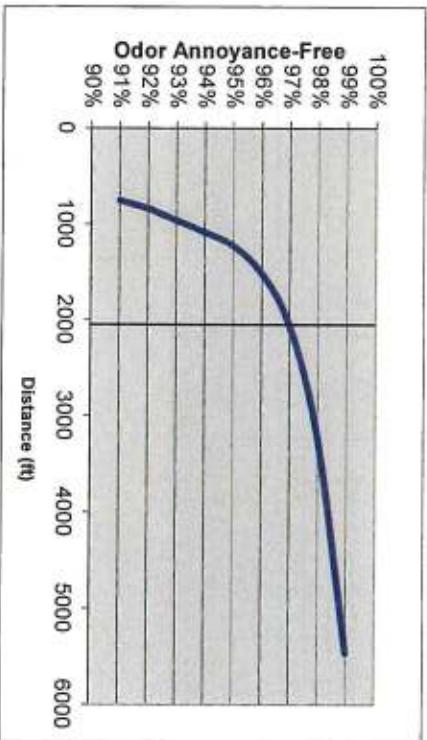
Farm Name: Mike Landuyt
 County: Ia Dieler
 Evaluator: NWB
 Date: 8/19/22

OFFSET Ver 2.0
 University of Minnesota
 10/1/2007

Source Characteristics Summary				Flux Rates (with control technology)				Source Emission Rates*			
Buildings	Similar Sources	Emit Area sq ft	Control Technology Type	Percent Treated	Odor ou/s/m2	OFFSET OER	H2S ug/s/m2	Ammonia ug/s/m2	Odor ou/s	H2S ug/s	Ammonia ug/s
Swine Finishing - deep pit	1	8036	None	0%	10.5	34.2	6.0	99.0	7643	4482	73948
Beef - loose housing	1	10584	None	0%	1.2	6	1.7	25.0	1210	1672	24595
Beef - loose housing	1	28500	None	0%	1.2	6	1.7	25.0	3298	4503	66227
Beef - loose housing	1	29500	None	0%	1.2	6	1.7	25.0	3373	4661	68551
Area Sources											
Earthen manure storage		0	None		14.0	13	25.3	107.0	0	0	0
User added		0	None		0.0	0.0	0.0	0.0	0	0	0

*Includes control technologies

Site Emissions	
Total Site Area (ft2)	76,620
Total Odor Emission Factor (TOEF)	69
Total Site H2S Emissions (mg/s)	15
Total Site H2S Emission AVERAGE (lbs/day)	3
Total Site H2S Emission MAX (lbs/day)	6
Total Site H2S Emissions (tons/yr)	1
Total Site Ammonia Emissions (mg/s)	233
Total Site Ammonia Emission AVERAGE (lbs/day)	44
Total Site Ammonia Emissions MAX (lbs/day)	89
Total Site Ammonia Emissions (tons/yr)	8
Source Edge to Nearest Neighbor (ft)	2050
OFFSET Annoyance-free frequency	97%



OFFSET Summary and Results

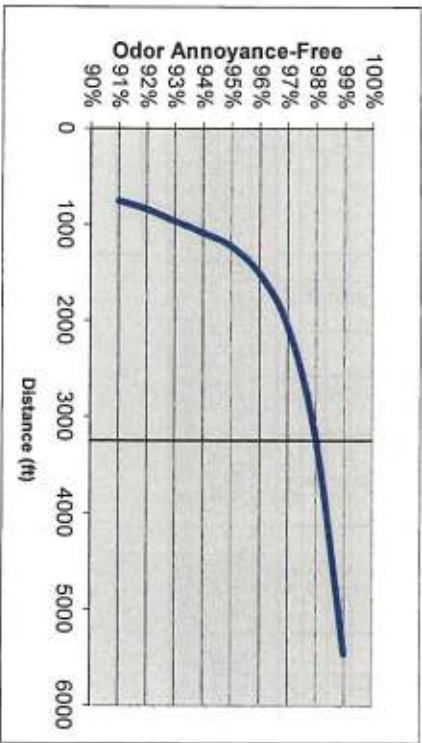
Farm Name: Mike Landuyt
 County: to Johnson
 Evaluator: NWB
 Date: 8/19/22

OFFSET Ver 2.0
 University of Minnesota
 version 2

Source Characteristics Summary				Flux Rates (with control technology)				Source Emission Rates*			
Buildings	Similar Sources	Emt Area sq ft	Control Technology Type	Percent Treated	Odor outs/m2	OFFSET OER	H2S ug/s/m2	Ammonia ug/s/m2	Odor ows	H2S ug/s	Ammonia ug/s
Swine Finishing - deep pit	1	8036	None	0%	10.5	34.2	6.0	99.0	7843	4482	73948
Beef - loose housing	1	10584	None	0%	1.2	6	1.7	25.0	1210	1672	24595
Beef - loose housing	1	28500	None	0%	1.2	6	1.7	25.0	3258	4503	66227
Beef - loose housing	1	29500	None	0%	1.2	6	1.7	25.0	3373	4661	68551
Area Sources											
Earthen manure storage		0	None		14.0	13	25.3	107.0	0	0	0
User added		0	None		0.0	0.0	0.0	0.0	0	0	0

*includes control technologies

Site Emissions	
Total Site Area (ft2)	76,620
Total Odor Emission Factor (TOEF)	69
Total Site H2S Emissions (mg/s)	15
Total Site H2S Emission AVERAGE (lbs/day)	3
Total Site H2S Emission MAX (lbs/day)	6
Total Site H2S Emissions (tons/yr)	1
Total Site Ammonia Emissions (mg/s)	233
Total Site Ammonia Emission AVERAGE (lbs/day)	44
Total Site Ammonia Emissions MAX (lbs/day)	89
Total Site Ammonia Emissions (tons/yr)	8
Source Edge to Nearest Neighbor (ft)	3250
OFFSET Annoyance-free frequency	98%



OFFSET Summary and Results

Farm Name: Mike Landuyt
 County: to self
 Evaluator: NWRB
 Date: 8/19/22

OFFSET Ver 2.0
 University of Minnesota
 12/12/17

Source Characteristics Summary

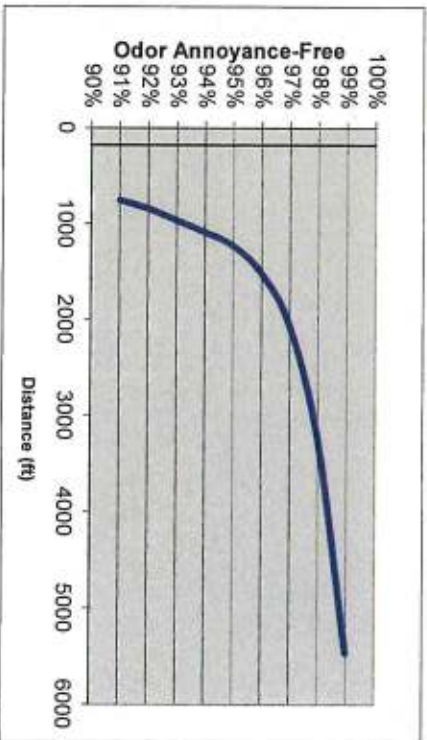
Buildings	Similar Sources	Emit Area sq ft	Control Technology Type	Flux Rates (with control technology)				Source Emission Rates*			
				Percent Treated	Odor outs/m2	OFFSET OER	H2S ugls/m2	Ammonia ugls/m2	Odor outs	H2S ugls	Ammonia ugls
Swine Finishing - deep pit	1	8036	None	0%	10.5	34.2	6.0	99.0	7643	4482	73948
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Beef - loose housing	1	28500	None	0%	1.2	6	1.7	25.0	3298	4503	66227
Beef - loose housing	1	29500	None	0%	1.2	6	1.7	25.0	3373	4661	68551
Area Sources											
Earthen manure storage		0	None		14.0	13	25.3	107.0	0	0	0
User added		0	None		0.0	0.0	0.0	0.0	0	0	0

*Includes control technologies

Site Emissions

Total Site Area (ft2)	76,620
Total Odor Emission Factor (TOEF)	69
Total Site H2S Emissions (mg/s)	15
Total Site H2S Emission AVERAGE (lbs/day)	3
Total Site H2S Emission MAX (lbs/day)	6
Total Site H2S Emissions (tons/yr)	1
Total Site Ammonia Emissions (mg/s)	233
Total Site Ammonia Emission AVERAGE (lbs/day)	44
Total Site Ammonia Emissions MAX (lbs/day)	89
Total Site Ammonia Emissions (tons/yr)	8

Source Edge to Nearest Neighbor (ft)	175
OFFSET Annoyance-free frequency	83%



Landuyt site map

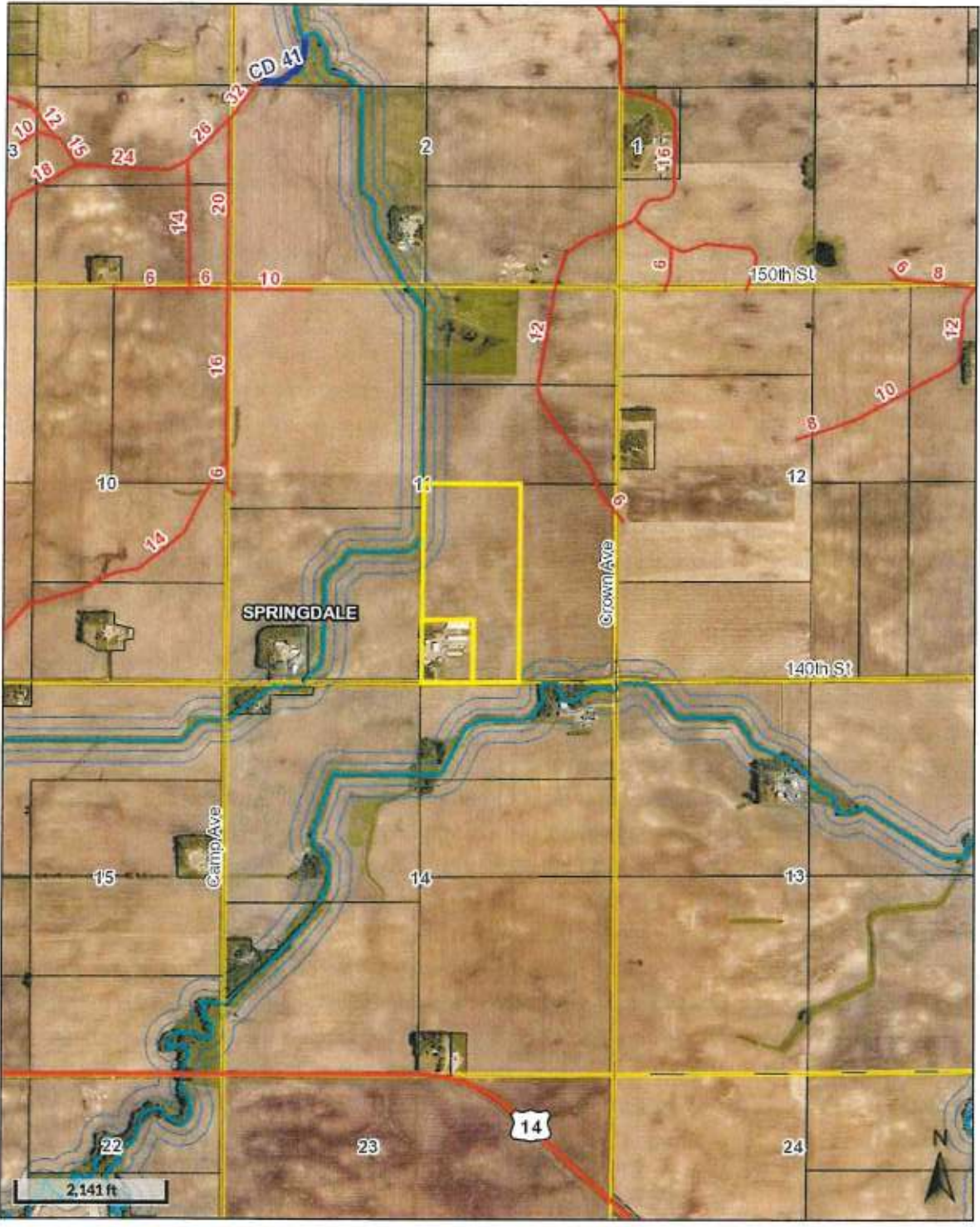


- Legend**
- Municipal Boundaries
 - Surrounding Counties
 - Townships
 - Open Ditch
 - Drain Tile
 - Lakes
 - Rivers
 - Parcels
 - Shoreland**
 - <all other values>
 - 150 ft
 - 300 ft
 - 300 ft L W
 - 1000 ft
 - FloodPlain
 - Floodplain
 - Major Roads**
 - County/Twp/City
 - State/Federal
 - County
 - Minor Roads

Date created: 8/19/2022
 Last Data Uploaded: 8/18/2022 9:33:21 PM

Developed by Schneider
 GEOSPATIAL

Landuyt area map



- Legend**
- Municipal Boundaries
 - Surrounding Counties
 - Townships
 - Open Ditch
 - Drain Tile
 - Lakes
 - Rivers
 - Parcels
 - Shoreland**
 - <all other values>
 - 150 ft
 - 300 ft
 - 300 ft L W
 - 1000 ft
 - FloodPlain
 - Floodplain
 - Major Roads**
 - County/Twp/City
 - State/Federal
 - County
 - Minor Roads

Date created: 8/19/2022
 Last Data Uploaded: 8/18/2022 9:33:21 PM

Developed by Schneider
 GEOSPATIAL

Redwood County Swine Composting Protocol:

- I. Purpose and scope: To allow hog producers to compost their dead livestock (carcasses) in lieu of rendering. These guidelines are based upon Minnesota Rules 1719 (Board of Animal Health), which are incorporated herein by reference. In any instance where these guidelines diverge from Minnesota Rules 1719, the stricter rule shall control.
- II. Site selection – must take into account:
 - a. Prevailing winds – reasonable attempts must be made to avoid sites where the prevailing winds will carry odors onto neighboring land uses (excepting agricultural fields and feedlots).
 - b. Public view – the compost facility must be shielded from public view, so that the composting material is not visible from public roadways or neighboring land uses.
- III. Facility – requirements for construction:
 - a. Overall design: Compost facility must consist of at least three (3) compost bays each with 20 cubic feet of area for every one (1) pound daily normal mortality. Each bay must have poured concrete walls on three sides and be gated on the front so that wild and domestic animals cannot access the compost. The entire structure must sit on a concrete pad and have a roof to deflect rainwater from the compost.
 - b. Floor: Floor must be constructed of 5" thick impervious concrete. Floor must be sloped toward the rear of the facility to keep liquid from running out of the composting area onto the ground.
 - c. Walls: Walls must be constructed of 6" thick impervious concrete. Cement walls must be no more than 5' high. If lower than 5', the walls must include fencing up to 5' to prevent wild or domestic animals from accessing the compost. Cement walls must be high enough to contain the compost material.
 - d. Roof: Roof must be supported by treated wood or metal supports and rafters. Roof must completely cover the composting bays so as to deflect rainwater.
- IV. Process – the following practices must be observed:
 - a. Dead pigs must be added within 24 hours of death.
 - b. Each composting bay shall begin with a 1' layer of litter. Thereafter, carcasses shall be stacked up to 1' and covered by 1' of litter. Add additional layers as needed.
 - c. Litter can be finely chopped vegetable matter (such as corn stalks), sawdust, or finished compost. The carbon to nitrogen ratio must be in the range of 15:1 to 35:1.
 - d. Carcasses must be kept at least 6" from the edge of the compost bay.
 - e. The 3 compost bays allow for a three stage composting process. When the first bay is full, start a new pile in the second bay. When the second bay is full, start a new pile in the third bay. When the third bay is full, empty the first bay and start over. Turn each bay every 7 to 10 days. Add water as necessary to keep up the heat.
 - f. Temperature:
 - i. Must be taken and recorded in each bay daily.
 - ii. Must be at least 130 degrees Fahrenheit.
 - iii. Temperature records must be kept on hand for 2 years.
- V. Protocol:
 - a. Must keep a written composting protocol describing the composting steps on-site.
 - b. Must instruct all employees on-site about the protocol.
- VI. Pests, such as flies and rodents, must be controlled
- VII. Transportation of Carcasses on public roads:
 - a. An owner who transports the owner's own carcasses does not need a permit to do so.
 - b. Carcasses transported on public roads must be in leak-proof, covered containers.
- VIII. Finished compost:
 - a. Must contain no visible soft tissue pieces.
 - b. May be handled and stored according to PCA and Dept. of Agriculture rules.

Conditions for Permit No. 11-22 (Mike Landuyt)

1. The permit holder shall comply with all applicable laws, rules, and regulations, including but not limited to Redwood County Ordinance, as hereafter amended from time to time. If a permit and/or license is required by the local, state, or federal authorities/entities, the permit holder shall apply for and obtain any and all required permits and/or licenses. A copy of all such permits and/or licenses shall be provided to the Redwood County Environmental Office within thirty (30) days of the date the permit holder received the same.
2. The permit holder shall allow the Redwood County Environmental Office to inspect the site for all purposes permitted by law whenever deemed necessary by the Redwood County Environmental Office.
3. All waste, refuse, and the like generated by or from the conditional use must be disposed of in the manner provided by the applicable local, state, and federal statutes, rules, and regulations.
4. The permit holder shall take appropriate and reasonable measures to assure that all surface water runoff satisfies all applicable local, state, and federal discharge standards.
5. The permit holder shall not allow the conditional use to be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted. The permit holder shall not allow the conditional use to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. Adequate measures shall be taken to prevent or control offensive odor, fumes, dust, and vibration, so that none of the foregoing will constitute a nuisance now or in the future.
6. Adequate utilities, access roads, drainage, and other necessary facilities shall be provided and continue to be provided by the permit holder now and in the future.
7. The manner in which manure is stored and disposed of shall comply with all applicable local, state, and federal laws, rules, and regulations. If manure is applied to land, it shall be applied to land at agronomic rates. Applied manure shall be injected or incorporated within 24 hours. The permit holder shall retain a record of all locations where manure is applied to land. Such records shall be maintained for a period of no less than five (5) years, measured from the date the manure is applied to land. Such records shall be submitted to the Redwood County Environmental Office upon request. The permit holder shall report any changes in spread agreements or spread areas to the Redwood County Environmental Office within thirty (30) days subsequent to any such change.
8. The permit holder shall abide by the Odor Management Plan attached to the application, or by any amended plan approved by the Zoning Administrator.
9. The County Board of Commissioners may at any time impose additional conditions as necessary and appropriate including but not limited to: the planting of trees and shrubs for use as a windbreak for the feedlot operation; the furnishing and placing in a dedicated account, to be administered by the County, an annual payment for reclamation purposes based upon the number of Animal Units involved; and restrictions on the days on which a manure storage structure may be disturbed or manure may be transferred, applied, incorporated, or injected.

10. Dead livestock shall be stored in such a manner as to not create a nuisance. Disposal of dead livestock by burial is strictly prohibited. Dead hogs may be composted according to the Redwood County Swine Composting Protocol, which is attached hereto and incorporated into Conditional Use Permit #11-22.
11. The permit holder shall construct the manure storage structure/concrete pit(s) to meet or exceed the minimum requirements set forth in the plans and specifications prepared by Michael G. Nelson, P.E. and signed by him on July 7, 2022, attached to the permit holder's application.
12. A perimeter tile line shall be maintained around the outside of the base of the pit wall and an inspection manhole shall be provided where the perimeter tile branches out into the local drain tile system.
13. The permit holder shall install a warning sign at all entrances to the concrete pits. These signs shall warn the reader of the dangers of entering the pit.
14. No construction on the pit shall be done between October 15th and April 15th, except by approval of the Zoning Administrator. The Environmental Office shall be contacted for inspection prior to pouring the pit floor and pit walls.
15. The Redwood County Planning Commission shall review the conditional use permit and shall be authorized to take any and all necessary action(s), including but not limited to revoking the conditional use permit and/or requiring the permit holder to reapply for a conditional use permit, if: 1) The Redwood County Environmental Office acquires information previously unavailable that indicates the terms and conditions of the permit do not accurately represent the actual circumstances of the permitted facility or the conditional use; 2) It is discovered subsequent to the issuance of the permit the permit holder failed to disclose all facts relevant to the issuance of the permit or submitted false or misleading information to the Redwood County Environmental Office, the Redwood County Planning Commission, or the Redwood County Board of Commissioners; 3) The Redwood County Environmental Office determines the permitted facility or conditional use endangers human health or the environment; and/or (4) The permit holder violates any of the herein described conditions.



REDWOOD COUNTY ENVIRONMENTAL OFFICE

*Planning & Zoning ● Parks & Trails ● GIS
Aquatic Invasive Species ● Septic Inspector
Drainage Inspector ● Agricultural Inspector*

PO BOX 130
REDWOOD FALLS
MINNESOTA 56283
PH: 507-637-4023

REDWOOD COUNTY PLANNING COMMISSION

**Landuyt feedlot
Conditional Use Permit Application #11-22
August 30, 2022**

FINDINGS OF FACT

ORDINANCE CRITERIA – The Planning Commission may recommend the granting of a Conditional Use Permit in any district provided the proposed use is listed as a conditional use for the district and upon a showing that the standards and criteria stated in this Ordinance will be satisfied and that the use is in harmony with the general purposes and intent of this Ordinance and the Comprehensive Plan.

In determining whether the proposed use is in harmony with the general purposes and intent of the Ordinance and the Comprehensive Plan, the Planning Commission shall consider and make findings on the following questions:

- 1) **What potential health safety and welfare impacts were raised at the hearing and why will they, or why won't they, impact the neighboring residents?**

- 2) **What potential impacts on area property uses were raised at the hearing and why will they, or why won't they, impact the property uses in the area?**

3) What potential impacts on property values or future development were raised at the hearing, and why will they, or why won't they, impact the neighboring properties?

4) What infrastructure is needed to support the proposed use and how will it be provided?

5) How do the goals, purpose and policies of the Zoning Ordinance and Comprehensive Plan apply to the proposed project?

NAME: _____

DATE: _____