Minnesota Pollution Control Agency

Records When Manure Ownership is Transferred - 300 or More Animal Units

Records for Feedlot Owners (manure generator) and Commercial Applicators

Copy 1: Kept by feedlot owner where manure is generated after completion of step #1.
Copy 2: Kept by applicator after completion of step #3.
Copy 3: Returned to feedlot owner where manure was generated after completion of step #3.

Step 1: Manure Generation. Completed by feedlot owner where manure is generated.

Name and Address of Facility Where Manure Generated: _____

_____

_____

Date(s) of Transfer: _____ **Total Quantity Transferred:** _____ ☐ **tons** ☐ **gallons**

Manure Analysis Results (must be representative of manure transferred)

Manure Source: _____ **Date Analyzed:** _____

N: _____ **P_2O_5:** _____ **K_2O:** _____ **Units:** ☐ **lb/ton** ☐ **lb/1000 gallons**

Name and Address of Company or Individual Taking Manure from Feedlot: _____

_____

_____

Step 2: Short-TermStockpiling. Completed by owner of the stockpile - Provide form to person applying manure. If no stockpile, go to step 3.

Stockpile Location(s)				Quantity Stockpiled (tons)	Date Stockpile Established	Date Land Applied
County	Township	Section	Quarter			

Step 3: Manure Application. Completed by individual applying the manure at the time of application. Return a copy to the feedlot owner where manure was generated within 60 days after applying manure. See the back of this form for manure spreading requirements when manure is from a facility with 300 or more animal units.

Name of Company or Individual that Applied Manure:_____ **Mailing Address:** _____

_____

Minnesota Department of Agriculture License Number of Commercial Applier:_____

Field ID	County	Township	Section	Application Rate (tons or gallons/ac)

Minimum State Requirements for Applying Manure
for use when manure ownership is transferred

Rate Limits

Match N needs - Limit rates so that estimated plant-available N from all manure and fertilizer sources combined does not exceed expected crop N needs for the upcoming crop.

Legumes - Crop-available manure N applied to legumes can not exceed 3.5 lbs N per bushel of soybeans; 50 lbs N per ton of alfalfa; 27 lbs N per ton of grass hay or pasture; 43 lbs N per ton of grass/legume; and 45 lbs N per ton red clover.

Base on Univ. of Minn. recommendations – Determine crop nitrogen needs and the amount of nitrogen available from manure or legumes from published recommendations of the University of Minnesota Extension Service or another land grant college in a contiguous state.

Base rates on: cropping sequence, expected yields, soil organic matter category, previous year manure credits, method of application, and manure analysis nutrient levels.

Calibrate equipment – Calibrate equipment regularly and apply evenly to ensure that the intended rates of application are consistent with actual rates of application.

Application Timing

Summer applications – Plant a cover crop where manure is applied in June, July or August to harvested fields that would otherwise remain without crop cover for the rest of the growing season. Use a soil nitrate test during the following spring to credit remaining nutrients.

Soil Phosphorus (P) Management

Soil P Testing – Test soils for P at least once every four years (where manure is regularly received from a feedlot with 300 or more animal units).

Avoid P Build-Up Along Waters – Manage manure additions so that soil P levels do not show increase over time within 300 feet of certain waters*, except where soil P is insufficient for crop growth, or where a 50-100' vegetative buffer is established along waters.

Avoid Extremely High P Soils – Avoid manure application onto fields where soils exceed P levels in the table below, unless a plan is submitted to the MPCA or County Feedlot Officer that describes how water pollution will be prevented when applying manure to these soils.

Soil Test Method	Outside of 300 ft from waters*	Within 300 ft from waters* and open tile intakes
Bray P1	**150 ppm**	**75 ppm**
Olsen	**120 ppm**	**60 ppm**

**** "waters" refers to lakes, streams, intermittent streams, wetlands over 10 acres, and drainage ditches without protective berms.***

Setbacks When Applying Manure in Sensitive Areas

Feature	Surface Application	Incorporation Within 24 hrs
Lakes, Streams	300'*	25'
Wetlands (10+ ac)	300'*	25'
Ditches w/o Berms	300'*	25'
Open Tile Intakes	300'	0'
Sinkholes w/o Berms		
Downslope	50'	50'
Upslope	300'	50'
Wells and Quarries	50'	50'

**** 100' vegetated buffer can be used instead of 300' setback for non-winter applications (50' buffer for wetlands/ditches)***

Keeping records

The cropland manager where manure is applied must keep the following records of manure application practices for a period of at least three years (six years if applying manure near waters):

- Manure nutrient test results (provided by feedlot owner)
- Field locations and acreage
- Dates of application and timing of incorporation
- Amount of manure applied per acre
- Total N and P applied on each field
- Soil nutrient test results
- If manure is applied in during the winter, record the land slopes, distance to nearest water, and field conservation practices in place.

Short-Term Stockpiling Practices

Follow all stockpiling setbacks for waters and conduits to waters (ranging from 50 to 300 feet); avoid sandy soils and high water table soils (<2'); avoid slopes over 6%; use diversions if slopes exceed 2%; and keep records as required in Minn. R. ch. 7020.2125. The stockpile size must not exceed the amount of manure needed to supply nutrient needs to 320 acres of crops.

Spills

If manure spills occur that have the potential to pollute waters, contact the state duty officer at 1-800-422-0798 immediately.

Minnesota Pollution Control Agency

More information: For more detailed information contact the MPCA or go to the web site at: http://www.pca.state.mn.us/index.php/topics/feedlots/feedlots.html