

# Applying manure from NPDES/SDS Permitted Feedlots

## Requirements in addition to those found in Minn. R. ch. 7020

Anyone that land applies manure in the State of Minnesota is required to follow the requirements of Minnesota rule Ch. 7020 (feedlot rule) in order to protect water quality. The fact sheet [Land Application of Manure: Minimum Requirements](#) available at: [www.pca.state.mn.us/feedlots](http://www.pca.state.mn.us/feedlots) summarizes those requirements.

This fact sheet summarizes the additional land application requirements of National Pollutant Discharge Elimination System (NPDES) and State Disposal System (SDS) permits.

### Manure management plans (MMP)

Use of the Nutrient Management Tool, a free online program developed by the MPCA, is required to develop an MMP. Access to the Nutrient Management Tool is available at: [www.pca.state.mn.us/business-with-us/land-application-of-manure](http://www.pca.state.mn.us/business-with-us/land-application-of-manure). A substantial change to the MMP, such as the addition of new fields, requires MPCA approval through a permit modification. A 14-day public notice period may be required prior to approval.

### Transferred ownership of manure

Manure cannot be transferred when the recipient intends to:

- Apply liquid manure during winter conditions anytime between December 1 and March 31.
- Apply solid manure during winter conditions within the month of March.
- Apply solid or liquid manure to vulnerable groundwater areas during winter conditions anytime between December 1 and March 31.

### Manure recipients must follow the land application requirements of the permits.

Manure recipients are required to comply with the MMP of the feedlot owner (manure generator), which includes land application requirements from the NPDES and SDS permit. These requirements are detailed below and are also incorporated into the Manure Transfer Tracking Form generated by the Nutrient Management Tool. Feedlot owners are required to provide this form to manure recipients at the time of transfer.

### Manure recipients must provide land application records to feedlot owners.

In order to verify the recipient followed the MMP of the feedlot, manure recipients must provide a complete land application record to the feedlot owner. The Manure Transfer Tracking Form includes space for the manure recipient to record the necessary information for return to the feedlot owner.

### Manure nutrient testing and application setbacks

- Manure must be tested annually.
- Manure must not be applied in a floodplain unless it is injected or immediately incorporated.
- Manure application is prohibited within 100-feet of a well, mine or quarry.

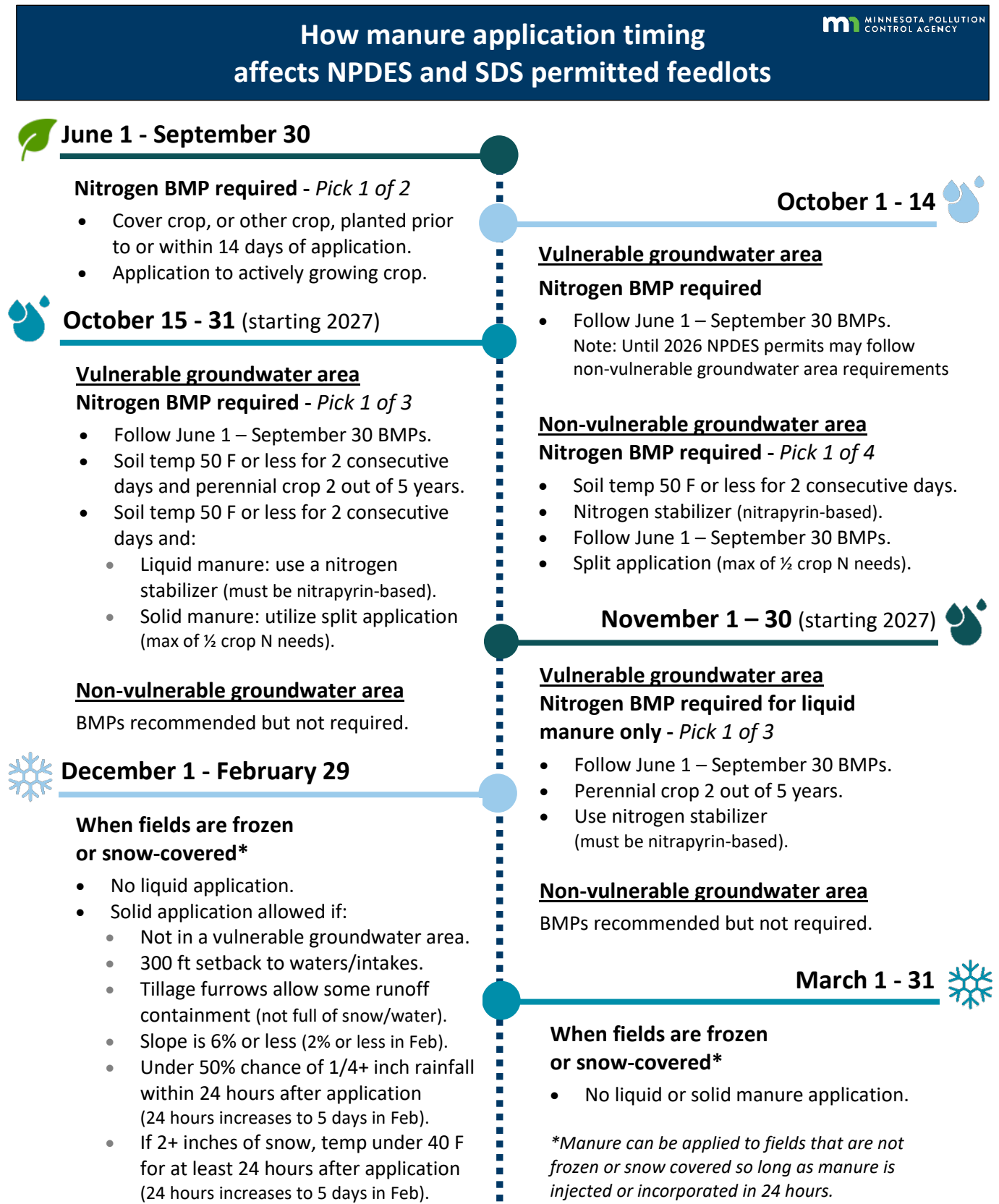
### Inspections of land applications

Visual inspections looking for signs of discharge are required at the following intervals:

- At least once each day manure is applied to the field.
- At the end of manure application to the field.
- Within 24-hours of rainfall of half an inch or greater that occurs within 14 days of application, unless the manure is injected or incorporated.

## Timing of manure application

The figure below summarizes permit requirements based upon the date of manure application. Requirements also vary if the field is in a vulnerable groundwater area. The [Nutrient Management Planning Map](#) displays vulnerable groundwater areas in Minnesota and can be found at: [www.pca.state.mn.us/business-with-us/land-application-of-manure](http://www.pca.state.mn.us/business-with-us/land-application-of-manure).



# Frequently asked questions about the land application requirements

## Winter application

- Q: Can I apply manure in March if the ground is not frozen or snow-covered?**  
A: Yes – the manure application prohibition only applies when fields are frozen or snow-covered. Manure must be injected or incorporated within 24 hours.
- Q: If we get an October/November snowfall, can I land apply manure?**  
A: Yes – the winter restrictions only apply to applications after November 30<sup>th</sup>.
- Q: If I can inject, can I apply liquids in early December, even if there is a light coating of snow?**  
A: Yes – the winter restrictions do not apply when manure is injected below the soil surface.
- Q: If I have a water line break and my liquid manure storage area fills up, can I land apply in the winter?**  
A: The permit allows for emergency applications in the winter. The permit has specific limitations applicable to emergency applications. You must notify the MPCA of emergency land applications.

## Nitrogen BMPs

- Q: Where can I find out if my field is in a vulnerable groundwater area?**  
A: Refer to your MMP, these areas are indicated on the field maps created. You can also use the interactive viewer at: [www.pca.state.mn.us/business-with-us/land-application-of-manure](http://www.pca.state.mn.us/business-with-us/land-application-of-manure).
- Q: How do I know what the soil temperature is?**  
A: You must utilize the nearest Minnesota Department of Agriculture (MDA) soil temperate network location: <https://app.gisdata.mn.gov/mda-soiltemp/>.
- Q: How do I determine if the soil temperature reached 50° F for 2 consecutive days?**  
A: The MDA soil temperature network provides a graph of soil temperature readings taken every 15 minutes for the previous 7 days. Soil temperatures displayed on the graph must have reached 50° F or less at some point during the day for 2 consecutive days.
- Q: Is it OK to apply to soils above 50° F after those soils had reached 50° F for 2 consecutive days?**  
A: Yes – the temperature at the time of application is not considered in the requirements.  
Note: In vulnerable groundwater areas other BMPs are also required in conjunction with cool soils.
- Q: Is there an approved list of nitrogen stabilizers?**  
A: No – the permit only requires that it be nitrpyrin-based and used at the recommended rates.

## Cover crops

- Q: Am I required to plant a specific type of cover crop?**  
A: There are no requirements on the type of cover crop but plant your cover in accordance with University of Minnesota recommendations. Weeds do not meet the cover crop requirements.
- Q: Will I be penalized if my cover crop doesn't grow?**  
A: Provided you made a good faith effort to plant the cover crop, lack of growth due to adverse weather conditions will be considered when determining compliance.
- Q: Do I need a cover crop if I apply manure to a hay/alfalfa field in September?**  
A: No – the requirements for cover crops only apply to fields without an actively growing crop.

## Transferred ownership

- Q: Do these requirements apply if I transfer ownership of manure?**  
A: Yes – the requirements of the permit are incorporated into the MMP for the feedlot and therefore manure recipients are required to comply with these requirements.
- Q: Where can manure recipients find out what conditions they must follow for land application?**  
A: A Manure Transfer Tracking Form generated by the Nutrient Management Tool summarizes the requirements recipients must follow and must be provided at the time of manure transfer.

## More information

For specific permit requirements refer to the NPDES and SDS general permits available at: <https://www.pca.state.mn.us/business-with-us/npdes-and-sds-feedlot-permits>.