STATE OF MINNESOTA

Minnesota Pollution Control Agency

Watershed Division

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS) Permit for a Concentrated Animal Feeding Operation (CAFO)
Permit Number MN0070254

PERMITTEE: Jon and Melissa Huseth, Ron and Diana Huseth,

FACILITY NAME: Clay View Dairy LLP

WATERSHED/BASIN: Mississippi River – Lake Pepin / Upper Mississippi River, Lower Portion

TOWNSHIP: Goodhue **COUNTY: Goodhue**

ISSUANCE DATE: TBD **EXPIRATION DATE: TBD**

The state of Minnesota, on behalf of its citizens, through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to construct, install, and operate a livestock facility located in the SE¼ of Section 10, Township 111 North, Range 15 West, Goodhue Township, Goodhue County (Facility), in accordance with the requirements of this permit.

The goal of this permit is to protect water quality in accordance with Minnesota and U.S. statutes and rules, including Minn. Stat. chs. 115 and 116, as amended, and Minn. R. chs. 7001, 7009, 7020, 7050, 7060, and the U.S. Clean Water Act.

This permit is effective on the issuance date identified above, and supersedes all previous certificates of compliance and previous permits that were issued for this Facility. This permit expires at midnight on the expiration date identified above.

Signature: _____

Randall G. Hukriede *for* The Minnesota Pollution Control Agency
Manager, Southwest Region
Watershed Division

If you have questions on this Permit, including specific Permit requirements, Permit reporting, or Permit compliance status, please contact:

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Toll Free: 800-657-3864
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I. Permitted Facility Description

A. Existing Facility

The existing Facility consists of the following:

1. One 100-foot x 430-foot total confinement barn with a 25-foot x 50 foot concrete stacking slab that houses 367 head (513.8 animal units (AU)) of mature dairy cows (over 1000 pounds).
2. One 110-foot x 160-foot total confinement barn with an attached 92-foot x 100-foot total confinement barn with a 30-foot x 170 foot concrete stacking slab that houses 179 head (250.6 AU) of mature dairy cows (over 1000 pounds).
3. One 59-foot x 248-foot total confinement barn with an attached 39-foot x 248-foot total confinement barn that houses 146 head (204.4 AU) of mature dairy cows (over 1000 pounds).
4. One 200-foot x 210-foot concrete feed storage area.
5. One 200-foot x 235-foot clay feed storage area.
6. One 154-foot x 100-foot clay feed storage area.
7. One 170-foot x 480-foot x 16-foot deep soil lined liquid manure storage area (LMSA).
8. One 36-foot x 30-foot x 8-foot deep LMSA.
9. One 13-foot x 170 foot and 13-foot x 100-foot sand lane.
10. One calf hut area that houses 20 dairy calves (4 AU).

The existing Facility houses a total of 972.8 AU.

B. Proposed Construction and/or Expansion

This Permit authorizes the Permittee to construct the following facility components in accordance with Minn. R. 7020, the schedule of compliance in Part III and all other Parts of this Permit, and the Permit application and associated approved plans and specifications.

1. One 11-foot x 505-foot sand lane.
2. One 100-foot x 190-foot concrete stacking slab.
3. One 300-foot x 260-foot x 16-foot deep geo-synthetic lined LMSA.
4. One 157-foot x 260-foot total confinement barn that houses 408 head (571.2 AU) of mature dairy cows (over 1000 pounds).
5. One composite lined LMSA for feed storage area runoff collection.
6. One calf hut area that houses 180 dairy calves (36 AU).

After the facility components listed above are constructed and all schedule of compliance items listed in Part III are completed, this Permit authorizes the Permittee to increase the total AU housed at the Facility by 607.2 AU.

C. Final Facility

The final Facility will consist of:

1. One 100-foot x 430-foot total confinement barn with a 25-foot x 50-foot concrete stacking slab that houses 367 head (513.8 AU) of mature dairy cows (over 1000 pounds).
2. One 110-foot x 160-foot total confinement barn with an attached 92-foot x 100-foot total confinement barn with a 30-foot x 170 foot concrete stacking slab that houses 179 head (250.6 AU) of mature dairy cows (over 1000 pounds).

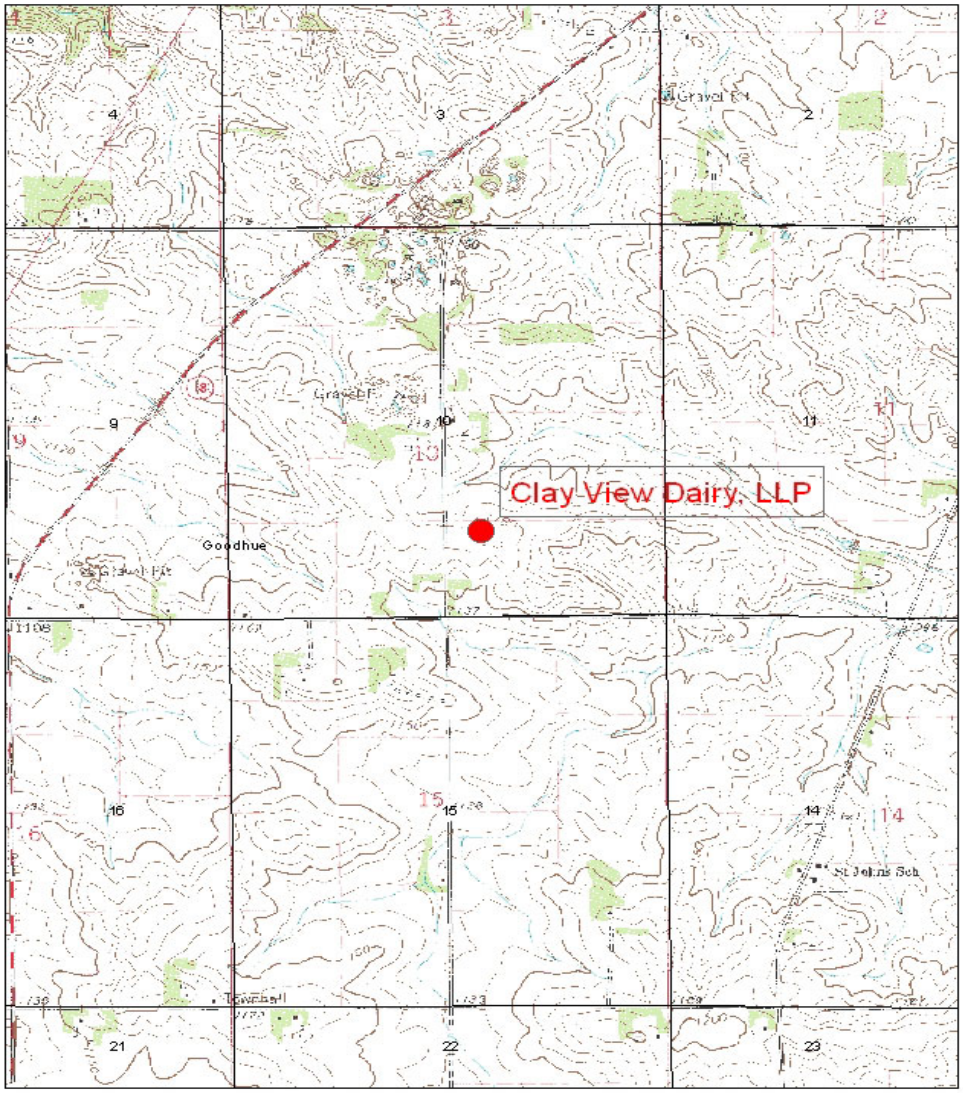
3. One 59-foot x 248-foot total confinement barn with an attached 39-foot x 248-foot total confinement barn that houses 146 head (204.4 AU) of mature dairy cows (over 1000 pounds).
4. One 200-foot x 210-foot concrete feed storage area.
5. One 200-foot x 235-foot clay feed storage area.
6. One 154-foot x 100-foot clay feed storage area.
7. One 170-foot x 480-foot x 16-foot deep soil lined liquid manure storage area.
8. One 36-foot x 30-foot x 8-foot deep liquid manure storage area.
9. One 13-foot x 170 foot and 13-foot x 100-foot sand lane.
10. One calf hut area that houses 200 dairy calves (40 AU).
11. One 11-foot x 505-foot sand lane.
12. One 100-foot x 190-foot concrete stacking slab.
13. One 300-foot x 260-foot x 16-foot deep geo-synthetic lined liquid manure storage area.
14. One 157-foot x 260-foot total confinement barn that houses 408 head (571.2 AU) of mature dairy cows (over 1000 pounds).
15. One composite lined LMSA for feed storage area runoff collection.

The Permittee is authorized to operate the final Facility at a final **capacity** of 1580 AU in accordance with this Permit and any approved plans and specifications submitted with the Permit application. The Permittee is prohibited from modifying the animal species and types housed within the animal holding facilities and/or exceeding the capacity of the animal holding facilities without first obtaining a modification of this Permit.

II. Facility Maps

A. Topographic Map

The permitted Facility is authorized to be operated in the location shown on this map.



B. Site Sketch

The permitted Facility components must be located in the areas shown on this site sketch in accordance with plans submitted with the Permit application and approved by the MPCA.

III. Schedule of Compliance

In accordance with Minn. R. 7001.0150, subp. 2, the Permitee shall undertake the following measures to correct pollution hazards at the existing facility according to the schedule and requirements set forth below.

A. Expansion Limitation

1. The Permittee is authorized to construct the components identified in item **Error! Reference source not found.**, upon issuance of this Permit. The Permittee may construct and populate the animal holding areas prior to construction of the geo-synthetic lined liquid manure storage area if, and only if, the facility maintains a minimum liquid storage capacity of nine months for the manure produced by the animals housed at the facility.

    a. The Permittee may construct and populate the animal holding areas prior to completion of item **Error! Reference source not found.**.

    b. The Permittee shall comply with the construction and notification requirements of this Permit and Minn. R. 7020.

B. Construction/Modification to Correct Pollution Hazard(s)

1. ***Final Compliance Date.*** By January 1, 2014, the Permittee shall complete construction of **the** runoff control basin for the storage area, item I.B.5 above, in accordance with the approved plans and specifications developed by Wenck and Associates dated February 15, 2012, and amended April 16, 2012.

2. ***Final Compliance Date.*** By January 1, 2013, the Permittee shall complete the modification of the stacking slab, item I.A.1 above, in accordance with permit application attachment submitted by Anez Consulting dated April 2, 2012.

C. Interim Facility Operation

1. The MPCA shall take no action for discharges/emissions from facility components that are being modified under this schedule of compliance to address pollution hazards, so long as the Permittee:

    a. Complies with all parts of this schedule;

    b. Takes reasonable temporary measures to minimize the extent of the discharge/emission addressed by this schedule;

    c. Records and reports discharges/emissions as required by this Permit; and

    d. Complies with all other parts of this Permit.

2. The act of implementing the schedule of compliance above does not authorize the Permittee to increase or create new discharges/emissions from the facility. Measures taken correct discharges/emissions as authorized in this schedule shall not release the Permittee from compliance with other rules, statutes, or Permit conditions.

D. Progress Reports

1. The Permittee shall submit progress reports in accordance with the following.

    a. Progress reports must be submitted not later than **14 days** after each compliance date identified in this schedule.

    b. If submittal of a report, plans, and specifications, or other written correspondence is the specific requirement of the compliance date, the submittal of these documents by the specified deadline shall constitute submission of a progress report.

    c. The progress reports shall state the Permittee's compliance with each date or explain why noncompliance has occurred and state the actions that have been taken to correct the noncompliance. Submittal of a report describing noncompliance does not relieve the Permittee of the duty to comply with the requirement.

    d. The progress reports shall be submitted in accordance with Part IX.C of this Permit.

E. Extensions

1. The Permittee may request a minor modification of this Permit to extend any of the compliance dates identified in this schedule, provided that the extension does not modify the final compliance date or interfere with the Permittee's ability to achieve the final compliance date, and is less than 120 days after the compliance date specified in the Permit.

2. To obtain an extension, the Permittee must submit the application to the MPCA in writing at least **30 days** before the scheduled deadline or as soon as possible before that date if the reason for the extension request arises less than 30 days before the deadline. The Permittee has the burden of demonstrating to the satisfaction of the MPCA that the request for the extension is timely, and that good cause exists for granting the extension.

3. No requested extension shall be effective until approved in writing by the MPCA. Following issuance of a letter granting the minor modification to extend the date, the Permittee shall complete the required action under this schedule in accordance with the date specified in the modification. If the extension is denied, the Permittee shall complete the required action under this schedule in accordance with the original date specified in the Permit.

4. The Permittee may request an extension of the final compliance date by following the procedure for a modification to this Permit as set forth in Minn. R. 7001.0190.

IV. Permit Coverage, Authorizations, and Limitations

A. Description of Frequently Used Terms.

For purposes of this Permit, the following terms shall apply throughout:

1. **"Facility" or "Facilities"** refers to areas used to confine livestock and poultry (with the exception of "pastures" as defined in Minn. R. 7020.0300, subp. 18) that meet the definitions of an **"animal feedlot"** under Minn. R. 7020.0300, subp. 3, or **"animal feeding**

operation (AFO)" under 40 CFR § 122.23(b)(1), including the production area, or other areas or structures used for the handling, storage, or treatment of manure, litter, process wastewaters, or manure-contaminated runoff.

2. **"Manure"** refers to the manure (as defined under Minn. R. 7020.0300, subp. 4), litter, process wastewater (as defined under Minn. R. 7020.0300, subp. 19b), and manure-contaminated runoff (as defined under Minn. R. 7020.0300, subp. 13b) that is generated or stored at the Facility.

B. Permit Authorization

1. This Permit becomes effective on the issuance date identified on the cover page

2. The Permittee is authorized to construct and operate the Facilities in compliance with the requirements set forth in this Permit and all requirements of Minn. R. ch. 7020 and any other applicable state and federal rules and regulations. No condition of this Permit shall release the Permittee from any responsibility or requirements under other federal, state/tribal, or local statutes, rules, or regulations.

3. The following state and federal rules and regulations are incorporated by reference as enforceable requirements of this Permit:

   a. Minn. R. Ch. 7020;

   b. Minn. R. 7001.0150, subp. 1; subp. 2, items C and D; and subp. 3, items A through O;

   c. Minn. R. 7001.1090, items A through H and L; and

   d. 40 CFR Pt. 122 and 40 CFR Pt. 412.

4. This Permit authorizes discharges of stormwater runoff from the Facility during construction and operation in compliance with the terms of this Permit. The Permittee is responsible for implementing water quality best management practices (BMPs) during construction activities until the site has undergone final stabilization and the Permitee is responsible for maintaining the BMPs during operation of the Facility (see Appendix C of this Permit).

C. Facility Plans.

1. The following plans submitted by the Permittee as part of the Permit application (or as specified within this Permit), are approved by the MPCA and are an enforceable part of this Permit. The Permittee must update these plans in the event of a change to the Facility that effects the implementation of the plans, and submit the updated plans to the MPCA for review and approval.

   a. **Air Emissions Plan** in accordance with Minn R. 7020 and this Permit;

   b. **Emergency Response Plan** in accordance with Minn R. 7020 and this Permit;

   c. **Manure and Nutrient Management Plan** in accordance with Minn R. 7020 and this Permit;

   d. **Operation and Maintenance Plan** in accordance with Minn R. 7020 and this Permit;

e. **Animal Mortality Plan** in accordance with Minn R. 7020 and this Permit;

f. **Design Plans and Specifications** in accordance with Minn R. 7020 and this Permit.

g. **A Stormwater Pollution Prevention Plan (SWPPP)** shall be prepared in accordance with Part VI of this Permit if an acre or more of land area is disturbed. If the construction activity will disturb **three or more acres** of total land area the SWPPP shall be submitted to the MPCA with the permit application. If the total land area that is disturbed is one acre or more but less than three acres, the SWPPP shall be prepared and retained on site.

2. If the MPCA notifies the Permittee, after issuance of this Permit, that the approved plans identified in the items above are deficient, the Permittee shall submit an amended plan within 45 days of being notified by the MPCA.

3. In the event that there is a conflict between an approved plan and this Permit or an applicable rule, the more stringent standard shall be applied.

D. Permit Expiration.

1. This Permit will expire on the Expiration Date found on page 1. Subject to Part IX.D.4 of this Permit, the Facility shall continue to operate under the conditions of the expired permit until the issuance date of a new permit, if applicable.

V. Land Application and Nutrient Management

A. Manure and Nutrient Management Plan (MMP).

1. **In General**. The Permittee shall develop, maintain, implement, and annually update a Manure and nutrient management plan (MMP) that includes all required items in Minn. R. pt. 7020.2225, subp. 4, and 40 CFR Pt. 412.4, 412.37, and 122.42. The MMP and land application practices must be in conformance with Part V.A.4 of this Permit when Manure is applied onto fields that are owned, rented, or leased by the Permittee, or where the feedlot owner/operator or employees of the feedlot owner/operator have access agreements to apply Manure at a time and rate that is controlled by the feedlot owner/operator. The Permittee must meet the requirements in Part V.C of this Permit when Manure ownership is transferred.

2. **MMP Updates**. The MMP shall be kept up-to-date on field-specific information that identifies when Manure will be applied, where Manure will be applied, the method of application, and how much Manure will be applied to each field during the following growing season, except where Manure ownership is transferred. The Permittee shall review the Facility's MMP at least annually for the following:

   a. Manure sources or amounts;

   b. Manure nutrient content;

   c. Methods of application;

   d. Fields used for application;

   e. Crop rotations;

f. Expected crop yields;

g. Soil test results;

h. Manure storage practices; and

i. Other management changes which affect the available nutrient amounts, crop nutrient needs, setbacks, or production area operation and maintenance.

Any changes to the MMP need to meet the requirements of this Permit and MMP submittal requirements in accordance with item 3, below.

3. **MMP Modifications**. If the MMP is modified after issuance of this Permit, the Permittee must submit any MMP revisions to the MPCA for review and approval. The revisions must be identified, and the Permittee cannot implement the proposed changes until the Permittee obtains approval from the MPCA. Upon approval of the modified MMP by the MPCA, the plan becomes an enforceable part of this Permit.

   a. ***Updates made by Permittee***. If any changes are made to the MMP for fields that are not considered to be transferred ownership, the Permittee must submit, on an MPCA standardized form, the proposed MMP revisions for MPCA review. If the MPCA determines revisions are substantial, the MMP is subject to public notification requirements in accordance with federal regulations.

      A 30-day public notice will be required for substantial changes consisting of any of the following:

      1) The addition of any new land application areas not previously included in the MMP of the Permittee or otherwise listed on an approved MMP as part of a permit for any other NPDES permit holder;

      2) Any changes to the maximum field-specific annual rates for nitrogen and phosphorus derived from all sources for each crop;

      3) The addition of any crop, and its corresponding rates of application for nitrogen and phosphorus, not included in the previous MMP; and/or

      4) Any changes to the site-specific components of the MMP that are likely to increase the risk of nitrogen and phosphorus transport from the field to waters of the state. Changes may include, but are not limited to: application methods not accounted for in the MMP narrative methodology; application timing that reduces nutrient uptake; conservation practice changes that could increase pollutant losses; or changes in procedures for handling, storage, or treatment of Manure that affects rates of application.

   b. ***Changes required by the MPCA.*** If land application practices in compliance with the state and federal rules and regulations and the Facility's MMP are found to cause pollution of waters, the MPCA may require revisions to the MMP to address any causative factors that led to the pollution in accordance with Minn. R. pt. 7020.2225, subp. 1, item A(2), and subp. 4. The Permittee shall follow those additional management practices as described in the revised MMP once approved by the MPCA.

4. **Annual Report**. The Permittee shall include the information pertaining to land application activities as outlined in VIII of this Permit in the Annual Report that is to be submitted to the MPCA **by March 1** of each year.

B. Fields Owned, Rented, or Leased by Permittee

When Manure is applied onto fields that are owned, leased, or rented by the Permittee, or are under an access agreement where the feedlot owner/operator maintains control of Manure application decisions such as rate and timing, Manure shall be managed and applied in accordance with the Permit conditions outlined in Part V.A.4. The MMP shall, at a minimum, contain requirements described in Parts V.B.1 through V.B.5. Records of land application activities shall contain requirements described in Part V.B.6.

1. Fields Available for Land Application.

   a. ***Amount and Location of Application Acreage***. The MMP must include field locations and total acreage available for Manure application, including maps or aerial photos showing field locations. Areas within fields that are not suitable for Manure application must be identified on the maps or aerial photos.

   b. ***Sufficient Acreage***. The Permittee shall maintain, either by direct ownership, rental, or written agreement with neighboring landowner(s), access to sufficient acreage to properly land apply Manure consistent with the terms and conditions of this Permit. The Permittee must provide proof of cropland accessibility when requested by the MPCA.

   c. ***Soil Conservation on Land Application Acreage***. For fields receiving manure, the MMP must describe the soil conservation practices to be used to control runoff to waters of the state.

2. **Soil and Manure Testing**. The MMP must describe the Manure and soil testing methods and frequency, the expected Manure nutrient content, and the annual amount of Manure and nutrients generated from the Facility that will need to be land applied. The soil and Manure sampling results are to be used for crop nutrient management determinations identified in V.B.3 below. At a minimum, soil and Manure testing must meet the following requirements:

   a. ***Manure***. The Permittee shall sample and analyze Manure for nutrient content at least once each year. The Manure sampling protocol shall be consistent with published University of Minnesota Extension Service (MES) recommendations. Manure samples must be taken from enough sources so that nutrient content is known for each storage area with differing types of animals, feed, watering systems, Manure handling, or other variables that may affect Manure nutrient content.

   b. ***Soil Nitrate***. Fields receiving Manure shall be sampled and tested for soil nitrate where recommended by the MES-published guidelines, including situations when Manure is applied during the summer (see V.B.4.a below).

   c. ***Soil Phosphorus***. Fields receiving Manure shall be sampled and tested in the upper six inches for soil phosphorus at least once every four years. Soil sampling techniques must meet the following, or alternatively, other published sampling standards by the University of Minnesota or Natural Resources Conservation Service (NRCS) can be substituted for requirements 1) to 3) below:

1) Each sample shall consist of a composite comprised of multiple cores (e.g., 15 to 20 cores);

2) On large uniform fields, one or more composite samples shall be taken per 20 acres, or per 40 acres if previous sampling showed little in-field variability;

3) On smaller fields or hilly/rolling ground, one or more composite samples shall be taken per five acres, or per 20 acres if previous sampling shows little in-field variability;

4) Sample zero to two inches and two to six inches separately where soil has not been tilled during the past four years, and use the results from the zero to two inch sample for phosphorus management determinations identified in V.B.3 below; and

5) Samples are to be tested at laboratories that participate in the Minnesota Department of Agriculture Soil Testing Lab Program.

3. **Nitrogen and Phosphorus Rates and Management**. The MMP must provide a written methodology that is consistent with requirements from Part V of this Permit.

The methodology must identify how the total plant-available nitrogen and phosphorus rates of application are determined. The methodology must include how any field-specific conditions, crop specific nutrient recommendations, timing and method of Manure applications will influence the rate of application.

For the first cropping year of permit coverage, the MMP must also include field specific: planned Manure application rates, in gallons or tons per acre; planned total plant-available nitrogen and phosphorus, in pounds per acre from both Manure and non-Manure sources; and the planned method and timing of application.

Any changes made to the submitted first year planned application rates must be consistent with the MMP's methodology.

Any proposed modifications to the MMP must comply with requirements in Part V.A.3.a of this Permit.

a. ***Nitrogen***. The Permittee shall control Manure application rates so the estimated nitrogen available to crops from <u>all</u> nitrogen sources does not exceed expected annual crop nitrogen needs for non-legumes and expected nitrogen removal for legumes.

1) Carry-over Manure nitrogen that becomes available to crops during the second cropping season after application must be accounted for when determining rates.

2) Nitrogen rate determinations must be based on realistic crop yields and the most recent published MES recommendations or those of another land grant college in a contiguous state. Deviations up to 20 percent may be justified in the MMP when evidence from field history, soil temperature, soil moisture, or other conditions show that insufficient nitrogen is available for crop use. When crop nitrogen deficiencies are visible or measured, remedial commercial nitrogen fertilizer applications above the 20 percent deviation are allowed if the need is documented.

3) Equipment used for land application shall be calibrated so that actual application rates are known. The MMP shall describe procedures used to calibrate the equipment.

b. ***Phosphorus***. In addition to meeting all nitrogen-based rate requirements, Manure additions must meet the following phosphorus-based rate requirements:

1) ***Phosphorus Management Near Waters***. Where field average soil test levels exceed 21 parts per million (ppm) Bray P1 or 16 ppm Olsen within 300 feet of a lake, stream, intermittent stream, drainage ditch without protective berms, or a public waters wetland, Manure application rates and frequency must be controlled so that Manure phosphorus applied during any six year period does not exceed crop phosphorus removal during that same period.

However, the above phosphorus rate restrictions do not apply to fields that have a non-Manured vegetated buffer established along the water and the average buffer width is at least 100 feet along lakes and streams and is at least 50 feet wide along ditches without berms, public waters wetlands, and intermittent streams.

2) ***Phosphorus Management on Extremely High Soil Test Phosphorus Soils***. Where field average phosphorus soil test levels exceed 75 ppm Bray P1 or 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, or exceed 150 ppm Bray P1 or 120 ppm Olsen on any other land, then Manure must not be applied unless both a) and b) are met below:

a) Manure is managed so that phosphorus additions do not exceed crop phosphorus removal through such practices as dietary management, reduced rates, reduced frequency of applications, or other controls, as follows:

i. For surface applications without incorporation within 24 hours, annual phosphorus application rates must not exceed crop phosphorus removal in the subsequent crop; and

ii. For injected or incorporated Manure (within 24 hours) Manure can not be re-applied until phosphorus from the previous Manure application is removed by subsequent crops (based on MPCA estimates of crop phosphorus removal); and

b) Phosphorus transport is controlled by runoff and soil erosion prevention practices in accordance with a phosphorus strategy documented in the MMP that achieves either:

i. A “very low” or “low” rating with the Minnesota Phosphorus Index originally developed for the animal agriculture GEIS and now found at www.mnpi.umn.edu; or

ii. Meets NRCS Technical Standard 590 (May 2001) for soils exceeding the phosphorus thresholds defined above (V.B.3.b.2)).

4. **Timing of Application**. The MMP must describe the expected months when Manure will be land-applied.

a. ***Summer Application***

1) Manure shall not be applied to harvested fields in June, July, or August unless a cover crop is planted for the remainder of the growing season. The MMP must identify the type of cover crop.

2) The spring preplant soil nitrate test shall be used following Manure application during the previous summer (between July 1 and September 15) to medium or fine-textured soils in the southern half of the state, and the previous crop was any type of grain and the upcoming crop is corn.

b. ***Winter Application***

1) Items 2) and 3) below apply to the land application of Manure when both a) and b) are met at the same time.

   a) Soils at the land application area are frozen or snow-covered, **and**

   b) During the time period beginning on December 1 and ending when soils or the land application area are no longer frozen or snow -covered.

2) Liquid Manure shall not be surface-applied when the winter conditions described in item 1) apply, except emergency applications. Liquid Manure is considered to be any Manure that does not meet the definition of "solid Manure" provided in item 3) below.

   Emergency applications of liquid Manure are subject to the following requirements:

   a) The Permittee may apply liquid Manure on an emergency basis only for situations beyond the control of the Permittee such as unusual weather conditions, unavoidable equipment failure, or other unforeseen circumstances. To be in compliance with this Permit, an emergency application only includes land application that is necessary to prevent Manure storage overflows at a site that is designed, constructed, and managed to contain Manure during the period of frozen or snow-covered soils, and where other options for additional temporary Manure storage are not feasible.

   b) The Permittee shall identify in the MMP alternatives to surface applying liquid Manure on frozen or snow-covered soils in emergency situations. If winter application is necessary, the MMP must provide the location and description of specific Manure application sites that can be used on an emergency basis. The use of these sites shall meet the following requirements:

      i. The application of liquid Manure on frozen or snow-covered soils shall be restricted to slopes of less than or equal to four percent;

      ii. The application rate is restricted to a maximum of 3,500 gallons per acre per winter season, not to exceed 60 pounds of crop available P_2O_5;

      iii. Applications must be more than 300 feet from sensitive features including lakes, streams, open tile inlets, sinkholes, water supply wells,

mines and quarries, intermittent streams, un-bermed drainage ditches, or public water wetlands; and

iv. The application rate of Manure onto frozen or snow-covered soil shall be adjusted to preclude runoff or ponding of liquid Manure during the application process.

c) ***Notification.*** The Permittee shall notify the Minnesota Department of Public Safety Duty Officer toll free at 800-422-0798, and the MPCA by phone, in accordance with Part IX.C of this Permit, within 24 hours of an emergency action.

d) ***Reporting.*** The Permittee shall report all emergency actions taken for the previous calendar year in the annual report required in Part VIII of this permit.

3) Solid Manure (15 percent or more solids, and handled as a solid) Winter Application

a) Solid Manure may be land applied during the winter conditions described in item 1) if all of the following conditions are met:

i. Manure is applied more than 300 feet from sensitive features including lakes, streams, open tile inlets, sinkholes, water supply wells, mines and quarries, intermittent streams, un-bermed drainage ditches, or public water wetlands;

ii. No active snowmelt is occurring that can create runoff from an application field, as determined by two or more inches of snow on the field and maximum-temperatures that exceed 40 degrees Fahrenheit or are predicted to exceed 40 degrees Fahrenheit within 24 hours of spreading Manure;

iii. Application is prohibited when the probability of rainfall over 0.25 inches is greater than 50 percent as predicted by the National Weather Service within 24 hours of the end of the application period;

iv. Slopes must be less than or equal to six percent on the entire area to be applied;

v. Water or ice cannot occupy tillage furrows to the extent that additional snowmelt or precipitation cannot be contained between furrows or in other depressional storage areas within the field; and

vi. Fields used for land application must meet a total phosphorus loss risk index number of two or less (low to very low relative risk) as calculated according to the Minnesota Phosphorus Index.

b) The MMP must identify field slopes, proximity to waters, soil and water conservation measures of all winter application sites of solid Manure, and reasons why alternatives to winter application are not feasible. Solid Manure application to frozen or snow-covered soil shall be only on those fields identified and approved by the MPCA in the MMP for winter application.

c. ***Prior to Rainfall.*** Broadcast Manure shall be immediately incorporated into the soil surface if a high probability (over 50 percent chance predicted by National Weather Service) of rainfall exceeding one-half inch is predicted within 24 hours of the end of the application period.

d. ***Fall Application to Coarse-textured Soils***. Fall application onto fields that are dominated by coarse-textured soils shall be delayed until soil temperatures in the upper six inches are less than 50 degrees Fahrenheit, unless otherwise first approved by the MPCA.

e. ***Saturated Soils***. Manure shall not be applied to soils that are saturated in the upper six inches, except for emergency applications that are first approved by the MPCA.

5. **Land Application Setbacks and Management for Sensitive Areas.** The MMP must describe protective measures to be taken to minimize the risk of water contamination when applying Manure within 300 feet of: lakes, streams, intermittent streams, drainage ditches without protective berms, uncultivated wetlands, surface tile intakes, and sinkholes. The MMP must also describe protective measures to be taken when applying Manure in floodplains, on soils with less than three feet above limestone bedrock, and in drinking water supply management areas where the well is vulnerable. The protective measures shall, at a minimum, consider any related requirements in state rules (i.e. Department of Natural Resources shoreland impact zones), as well as include the following:

a. ***Application near Waters and Conduits to Waters***. The Permittee, when applying Manure within 300 feet of any lake, stream, intermittent stream, public waters wetlands, drainage ditches without berms, other waters of the United States, and open tile intakes or other conduits to surface waters, must comply with one of the following five sets of management practices. If the options identified in items 3), 4), or 5) below are used, the Permittee must demonstrate on page 5 of the permit application that the pollutant reductions on fields to receive Manure are equivalent or better than the reductions achieved by a 100-foot Manure application setbacks.

1) A vegetative buffer must be maintained that:

a) Consists of perennial grasses or forages;

b) Is a minimum of 100-feet wide along lakes and perennial streams, 50-feet wide along intermittent streams, public waters wetlands, and drainage ditches without berms, or 35-feet wide next to open tile intakes and other conduits to waters; and

c) Does not receive Manure applications.

2) A 100-foot setback from the feature where no Manure is applied, combined with a vegetated buffer maintained within the 100 foot setback and along the water or conduit to water that is at least one rod (16.5 feet) wide.

3) A non-Manured setback, immediate incorporation, and soil phosphorus management, as follows:

a) No application of Manure within 25 feet of the water or conduit to water;

b) Manure is injected or incorporated into the soil within 24 hours or prior to rainfall (whichever occurs first) within 300 feet from the water or conduit to water; and

c) Manure is applied at a rate and frequency that will not allow soil phosphorus levels to increase over any six year period, except that soil phosphorus may be increased to 21 ppm (Bray P1) or 16 ppm (Olsen), when soil testing indicates soil phosphorus test concentrations are less than these values.

4) A solids settling area and immediate incorporation, as follows:

a) A solids settling or filtration area results in at least 75 percent (on average) of the solids settling out prior to runoff discharging to waters; and

b) Manure is injected or incorporated into the soil within 24 hours or prior to rainfall (whichever occurs first) within 300 feet and upslope of the water or conduit to water.

5) Implementation of other MPCA-approved practices that have been demonstrated to provide an equal degree of water quality protection as both a 100-foot setback and items 1) or 3) above, based on research by a land grant university.

b. ***Application near Wells, Mines, and Quarries***. Manure shall not be applied to land within 100 feet of an agricultural wellhead, or within 50 feet of any other water supply well, mine, quarry, or unsealed abandoned well.

c. ***Application Near Sinkholes***. Manure shall not be applied within 100 feet of a sinkhole. Where land slopes toward a sinkhole and is within 300 feet of the sinkhole, Manure shall be injected or incorporated within 24 hours and prior to rainfall. Exceptions are permitted where diversions prevent Manure-contaminated runoff from entering the sinkhole.

d. ***Application Using Irrigation Equipment***. Manure application by a traveling gun, center pivot, or other irrigation equipment is prohibited within 300 feet of lakes, streams, intermittent streams, public waters wetlands, and drainage ditches without berms.

e. ***Road Ditches***. Manure application into road ditches is prohibited. If the road ditch is an intermittent stream or conduit to waters, then one of the five practices under Part V.B.5.a must be followed near the road ditch.

6. ***Land Application Records***. The Permittee shall maintain records of land application of Manure for a minimum of **six years.** The Permittee shall document the required information on a form provided by the MPCA or another form that includes all required information. These records shall be made available in accordance with Part VIII.A of this Permit.

For each **field** where Manure is applied, the following information is required:

a. Field location and number of acres actually used at each land application site, including a field identifier that is unique to the field and shown on maps or aerial photos in the MMP;

b. Results and date of the most recent nutrient analyses;

c. Dates of Manure application;

d. Method of application, including number of days to incorporation (if incorporated within 10 days of application);

e. Gallons or tons of Manure applied on each field;

f. Total plant-available nitrogen applied in pounds per acre from all sources, including first and second year nitrogen available from Manure, fertilizer nitrogen, and any other sources;

g. The total plant-available pounds of phosphate applied from all sources, including Manure, fertilizer, and any other sources;

h. The crop grown and the expected crop yields for crops that have University of Minnesota Extension Service recommendations which are dependent on crop yield information; and

i. Any results of soil testing for nitrogen and phosphorus.

For the **Facility**, the following information is required:

j. Weather conditions (type of precipitation and amount) at the time of application and for 24 hours prior to and following application. The Permittee may utilize data generated by a government agency or educational institution for this purpose;

k. The results of Manure nutrient testing for each source of Manure from the Facility that include, at a minimum, the amount of nitrogen and phosphorus in the Manure;

l. Documentation of the test methods and sampling protocol used to sample and analyze Manure and soil;

m. The total amount of each source of Manure that is applied to land (in gallons or tons);

n. Dates that liquid Manure application equipment was last inspected; and

o. Name and address of any commercial hauler or applicator who received the Manure.

7. ***Discharges from Land Application Sites***

a. The Permittee shall prevent Manure from discharging into waters of the state during the application process, such that Manure shall not be directly applied into waters of the state, and Manure shall be prevented from flowing off the field into waters of the state during and immediately following application and prior to rainfall.

b. The Permittee must report in accordance with VIII.A.3.b of this Permit any land application discharge to waters of the state that occur:

1) During non-precipitation induced events as described in item a above; or

2) As a result of wet weather discharges that are not considered agricultural stormwater discharges.

c. Revisions to the MMP may be requested by the MPCA to address land application management that leads to water pollution either from precipitation runoff events or direct discharges of Manure during the application process.

C. Transferred Ownership of Manure

The Permittee must meet the following requirements for transferred ownership of Manure.

1. **MMP.** The MMP shall include the following items:

   a. The months when Manure ownership transfer is expected to take place;

   b. The amount of Manure expected to be transferred;

   c. Expected Manure recipient names, if known;

   d. Manure nutrient testing protocol, showing that the Permittee will sample and analyze Manure at least once annually in accordance with Part V.B.2.a; and

   e. A description of minimum state Manure application requirements and how that information will be provided to Manure recipients. The description must include specific state requirements that address the following:

      1) Nitrogen rate limits and planning needed to assure that nitrogen rate limits will be met;

      2) Soil phosphorus and soil nitrate testing requirements;

      3) Phosphorus application restrictions and planning requirements prior to application onto soils testing high in phosphorus;

      4) Summer application restrictions where no cover crop is planted for the remainder of the growing season following application;

      5) Winter application restrictions;

      6) Special protection area and sensitive area management requirements;

      7) Recordkeeping forms or a list of recordkeeping requirements for Manure application and short-term stockpiling;

      8) Land application sites and Manure rate records required to be kept by the Facility owner when manure ownership is transferred;

      9) Application methods, equipment, and calibration procedures needed to comply with Manure rate and sensitive area management restrictions; and

      10) Reporting discharges that occur as a result of land application practices.

2. Prior to or at the time of Manure transfer, the Permittee must provide the Manure recipient with the following:

a. A description of minimum state requirements for manure application as required in V.C.1.e above; and

b. The most current Manure nutrient analysis.

3. **Records**. Where Manure ownership is transferred for application to fields not owned, leased, or rented by the Permittee, the Permittee must keep the following records for a period of **six years** following Manure application in accordance with Part VIII.A of this Permit:

   a. Total amount of each Manure source from the Facility that was sold or given away (in gallons or tons);

   b. The date(s) of Manure transfer to other parties;

   c. Results of the Manure nutrient analyses for each source of Manure from the Facility;

   d. Name and address of any commercial applicator or other person(s) who received the Manure, including a signature indicating that the recipient received a copy of the state Manure application requirements;

   e. The location where the Manure was applied; and

   f. The rate(s) of application (in tons per acre or gallons per acre).

4. **Updates to the MMP**. The Permittee shall annually review the Facility's MMP and update it as necessary to reflect changes in Manure sources or amounts, Manure nutrient content, Manure storage practices, or Manure recipients.

VI. Facility Construction, Operation, and Maintenance

A. General Facility Requirements

1. The Permittee is authorized to construct and operate the animal confinement and Manure handling areas described Part I of this Permit in accordance with the application and plans and specifications approved by this Permit. Additionally, the plans in Part IV.C that apply to the Facility are incorporated into this Permit by reference and made enforceable parts of this Permit. The Permittee shall implement the requisite plans identified in Part IV.C in accordance with this Permit and the approved plans.

2. The location prohibitions, setbacks, and separation distances required in Minn. R. ch. 7020 and any applicable portion of Minn. R. 4725.4450 (Minnesota Department of Health water-supply well separation distances) shall be applied to the placement of all animal confinement and Manure handling areas or any other applicable sources of contamination at a Facility. Any new construction or modification conducted at a facility shall comply with Minn. R. ch. 4725 as revised effective August 4, 2008. Provisions to this rule are not retroactive.

3. Manure and other pollutant sources (e.g., silage bunkers) shall be isolated from outside surface discharge (e.g., clean water surface run-on) by ditches, dikes, berms, terraces, or other such structures designed to carry peak flows expected at times when the 25-year, 24-hour rainfall event occurs. These structures shall be properly maintained by the Permittee.

4. The collection, handling, storage and disposal of hazardous and solid wastes used at the Facility shall be done in accordance with items a and b below. Examples of the type of hazardous wastes involved include, but are not limited to pesticides, hazardous and toxic chemicals, and petroleum products and by-products.

    a. Collection, handling, storage, and disposal of hazardous and solid wastes must be done in accordance with the MPCA's solid and hazardous waste rules, Minn. R. ch. 7035 and 7045, respectively. This requirement applies to the disposal of waste material generated during construction activities, as well as during normal operation and maintenance at the Facility. This Permit does not provide an exemption to any applicable requirements for a hazardous waste permit.

    b. The Permittee shall develop and implement controls to prevent the inappropriate introduction of chemicals into the Manure, wastewater, and stormwater storage and handling systems.

5. The Permittee must comply with all applicable soil erosion and sediment control requirements in accordance with Part VI and Appendix C (Stormwater, Soil Erosion, and Sediment Control Requirements for Feedlot NPDES/SDS Permits).

6. Manure generated at this Facility that is hauled on federal, state, or local highways, roads, or streets must be hauled in such a way as to prevent Manure from leaking, spilling, or otherwise being deposited in the right-of-way. Manure deposited on a public roadway must be removed and properly disposed of by the hauler of the Manure.

7. Animals at the Permittee's Facility must be prevented from entering waters of the state. The Permittee shall ensure that animals are prevented from coming in contact with waters of the state.

8. The owner/operator of the Facility is required to submit a revised permit application to the MPCA for review and approval in accordance with Part IX of this Permit prior to:

    a. Constructing a new or expanded animal housing area or Manure storage area;

    b. Increasing the animal unit capacity for which this Permit was issued; or

    c. Significantly altering the method used to manage the Manure by such actions as changing the type of animal species housed at the facility, installing an anaerobic digester, or a modification to the Facility that would increase the potential for a discharge or increase air emissions.

    The activity for which the permit application was submitted shall not begin until the owner/operator has received approval from the MPCA.

9. If there are changes in the control or ownership of the Facility, a request for permit transfer and/or permit application shall be submitted to the MPCA in accordance with Part IX of this Permit.

10. **Inspections**. The following inspections are required to be made by the Permittee:

    a. A **weekly** visual inspection of all stormwater diversion devices and runoff diversion structures.

b. A **daily** inspection of all water lines, including drinking water or cooling water lines; and

c. **Periodic** inspections for leaks in any equipment used for land application of Manure.

11. Any deficiencies found as a result of the inspections required by item 10 above must be corrected as soon as possible.

12. **Recordkeeping Requirements**. The following records are required to be retained in accordance with Part VIII.A of this Permit:

    a. The results of the inspections required by item 10 above including any deficiencies found; and

    b. Documentation of any actions taken to correct deficiencies found during the inspections and corrected in accordance with item 11 above, including the date that the deficiency was discovered and the date when corrective measures were completed. For any deficiencies not corrected within 30 days of discovery, the documentation must include an explanation as to why the corrections were not made within the 30-day period and the status of the corrective measures being taken to resolve the deficiencies.

B. Conditions for All Manure Storage Areas.

1. The Permittee is prohibited from discharging, depositing, or otherwise placing any substance into the Manure storage area(s) except Manure unless expressly authorized in writing by the MPCA.

2. The Permittee shall operate and maintain the Manure storage areas(s) in accordance with the Operation and Maintenance (O&M) Plan identified in Part IV of this Permit. The O&M Plan shall, at a minimum, include information pertaining to:

    a. The Manure storage and handling system that ensures adequate Manure storage capacity to manage Manure in accordance with the conditions in this Permit;

    b. Procedures to ensure proper operation and maintenance of the Manure storage area; and

    c. The management of stored Manure that is consistent with the MMP required in Part V of this Permit.

3. Surface drainage and building gutter systems must be discharged away from any Manure storage areas. The areas around any Manure storage areas must be graded to allow for surface water drainage away from the Manure storage area and to prevent pooling of rain or snow melt waters around the immediate vicinity of these structures.

4. All storage areas used to store Manure generated at the Facility or brought to the Facility including, but not limited to, LMSAs, Manure stockpiles, and Manure compost areas shall comply with the effluent limitation requirements provided in Part IX.A.1.

5. **Recordkeeping Requirements**. Records documenting the current design of any Manure storage or manure contaminated runoff containment structures used by the Facility, including volume for solids accumulation, design treatment volume, total design volume,

and approximate number of days of storage capacity, shall be maintained by the Permittee in accordance with VIII.A of this Permit.

C. Liquid Manure Storage Area Requirements

The following requirements apply to the operation and maintenance of all LMSAs:

1. The LMSA(s) shall be operated and maintained to meet the approved design plans and specifications and the technical standards outlined in Minn. R. 7020.2100, including, but not limited to, the storage capacity, seepage requirements, soil investigations, separation distances to fractured bedrock, and groundwater.

2. The Permittee shall provide fencing around the perimeter of the LMSA(s) for all at-grade or near grade LMSAs where accidental or unauthorized access by humans or livestock may cause damage to the LMSA(s) or may pose a threat to the LMSA(s) or the safety of anyone venturing on site. Warning signs shall be placed in prominent locations around the LMSA(s).

3. **Depth Markers**. A marker or other system to measure the liquid depth shall be installed on each **open air LMSA** located on the Facility. The depth marker shall clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation from the 25-year, 24-hour rainfall event in the structure for all types of Facilities <u>except</u> new source swine, poultry, or veal operations. For LMSAs located on new source swine, poultry, or veal Facilities, the depth marker shall clearly indicate the minimum capacity necessary to contain the maximum runoff and direct precipitation associated with the design storm used in sizing the impoundment for no discharge.

4. **Inspections.** The following inspections are required to be made by the Permittee:

    a. A **weekly** visual inspection of the LMSA and any devices channeling manure contaminated runoff to the LMSA;

    b. A **weekly** reading of the depth marker in each **open air LMSA**; and

    c. For LMSAs with a perimeter drain tile, a **monthly** examination of the monitoring port or drain tile outlet for water flow and signs of discoloration or odor in any water flowing in the drain tile.

5. Any deficiencies found as a result of the inspections required by item 4 above, must be corrected as soon as possible.

6. **Recordkeeping Requirements**. The following records are required to be retained in accordance with Part VIII of this Permit:

    a. The results of the inspections required by item 4 above, including any deficiencies found;

    b. Documentation of any actions taken to correct deficiencies found during the inspections and corrected in accordance with item 5 above, including the date that the deficiency was discovered and the date when corrective measures were completed. For any deficiencies not corrected within 30 days of discovery, the documentation must include an explanation as to why the corrections were not made within the 30-day period and the status of the corrective measures being taken to resolve the deficiencies; and

c. The date, time, and estimated volume of any overflow from any LMSAs.

7. **Reporting Requirements**. Any damage and repairs occurring in the LMSA over a year must be reported in the Annual Report required by Part VIII of this Permit.

D. Liquid Manure Storage Area Construction Requirements

The following requirements apply to the construction of all LMSAs:

1. The LMSA(s) shall be designed to meet the technical standards outlined in Minn. R. 7020.2100, including, but not limited to, the storage capacity, seepage requirements, soil investigations, separation distances to fractured bedrock, and groundwater.

2. The LMSA(s) shall be constructed according to the design plans and specifications approved by the MPCA.

3. **Construction Notification**. The Permittee shall notify the MPCA staff toll-free at 800-657-3864, or at the telephone number listed on the cover letter for this Permit, **at least three (3) days** prior to beginning each of the following construction activities so that on-site inspections may be performed at the discretion of the MPCA staff. The Permittee shall identify the Facility name, permit number, county, township, section number, and the date when construction or other listed activity listed below will begin:

   a. Start of construction of each proposed LMSA; and

   b. Completion of construction of each LMSA. (For below-grade concrete pits, the notification after construction shall be done prior to backfilling the walls of the pit.)

4. **Construction Inspection**. A qualified inspector shall record observations regarding conformance during construction of the LMSA(s) with the approved plans and specifications. These observations are to be recorded on the Construction Inspection Form for Liquid Manure Storage Areas (inspection form) provided by the MPCA and available at the MPCA website (www.pca.state.mn.us). **One inspection form is to be used for each LMSA that is constructed.** The inspector shall meet the qualifications and document the information outlined in Minn. R. 7020.2100, subp. 6.

5. **Construction Certification by Contractor**. The contractor responsible for installation of the LMSA(s) shall certify that the structure(s) was constructed in accordance with the approved plans and specifications by signing the inspection forms referenced in item 3.

6. **Construction Report by Design Engineer**. Within **60 days** after construction has been completed, the Permittee shall submit to the MPCA, in accordance with Part IX.C, a certification from the design engineer that the LMSA(s) has been constructed in accordance with the MPCA-approved plans and specifications, including any addendum to the plans and specifications, reviewed and approved by the MPCA, and in accordance with requirements of this Permit. The construction report must include a copy of the inspection forms with the inspector's report and the contractor's certification as required in items 4 and 5 above, respectively.

   The Permittee shall include a set of as-built plans with the final construction reports. The as-built plans shall contain, in detail, the final construction plans and specifications for the facilities.

E. Solid (Non-liquid) Manure Storage Area Requirements

1. **Stockpiling**. Minn. R. ch. 7020 provides requirements for both short-term and permanent stockpile sites. Short-term sites are those that are used for one year or less. Permanent stockpile sites are those that are used for more than one year.

   a. ***All Stockpiling***.

      1) The Permittee shall operate and maintain all Manure stockpile sites, regardless of the duration of storage, in accordance with Minn. R. ch. 7020.2125.

      2) Manure shall not be placed on a stockpiling site unless a three-to-one horizontal-to-vertical ratio can be maintained or the Manure has, at least, a 15-percent solids content.

      3) Manure shall not be stockpiled in rock quarries, gravel or sand pits, bedrock, or any mining excavation sites.

      4) A minimum distance of two feet shall be maintained between the base of the stockpile and the seasonal high water table or saturated soils, as identified in the most recent USDA/NRCS soil survey manual or based on a site-specific soils investigation.

   b. ***Short-term Stockpiles***. The Permittee shall also comply with the following requirements for short-term Manure stockpiles:

      1) No later than **one year** after the date when the short-term stockpiling was initially established at the site, Manure shall be removed from the stockpile sites and land applied according to Part V of this Permit.

      2) The volume of any short-term stockpile must not exceed the agronomic needs of the crops for the tract of land on which stockpiled Manure is to be applied; but in no case shall the volume be greater than the agronomic needs of the crops on 320 acres.

      3) The separation distances and prohibitions listed in Minn. R. 7020.2125, subp. 2. C and E, shall apply.

      4) A vegetative cover must be established on the short-term stockpile area for at least one complete growing season prior to reuse of a site as a short-term stockpiling site for Manure with the following exceptions:

         a) Sites located within the confines of a hoofed-animal open lot at a Facility having the total capacity to hold fewer than 100 AU; and

         b) Sites where Manure is stockpiled for fewer than 10 consecutive days and no more than six times per year.

      5) ***Recordkeeping Requirements***. Records shall be retained in accordance with Part VIII of this Permit.

         These records shall document the following items:

         a) The location of the short-term stockpile;

         b) The date which each short-term stockpile was established;

c) The volume of Manure stockpiled;

d) The nutrient analysis of the Manure; and

e) When the stockpiled Manure was land applied.

Manure stockpiled for fewer than 10 consecutive days and no more than six times per year is not required to be recorded separately.

c. ***Permanent Stockpiles***. The Permittee shall also comply with the following requirements for permanent stockpiles:

1) ***Operation and Maintenance***. The permanent stockpiles shall be operated and maintained at all times to provide protection of the stockpile's integrity and structural reliability and in compliance with all parts of Minn. R. 7020.2125, Subp. 4, including but not limited to:

a) Maintenance of water diversion structures, as necessary; and

b) Maintenance of the required thickness of the stockpile pad.

2. **Composting of Manure**

Any Manure composting facility shall be constructed, operated, and maintained in accordance with the following requirements:

a. Any composting of Manure shall meet the requirements for stockpiling of Manure listed in item 1 above., *except* that composting being done at a site for one year or less (short-term) shall also meet the requirements of Part VI.A.3 for preventing surface waters and overland flow of water from coming in contact with the compost area.

b. Any Facility where solid waste is composted with Manure shall also comply with Minn. R. 7035.2836, subp. 4 through 7.

c. ***Composting Methods***. Finished composting shall be produced using one of the processes described in Minn. R. 7020.2150, subp. 2, item C.

d. The Permittee shall analyze the finished compost material for the following parameters:

1) pH;

2) moisture content;

3) particle size;

4) NPK ratio; and

5) Soluble salt content.

e. ***Recordkeeping Requirements***. Records shall be developed in accordance with the Facility O&M Plan and retained in accordance with Part VIII of this Permit. These records shall document the composition of the composted material.

f. ***Reporting Requirements***. The following information shall be included in the Annual Report required under Part VIII of this Permit:

1) The quantities and sources of Manure, bulking agents, and/or solid waste material delivered to the Facility;

2) Temperature and retention time data for all compost produced; and

3) The analysis results recorded under item e above.

F. Permanent Manure Stockpile Construction Requirements

1. A permanent stockpile site shall be constructed under the following minimum conditions:

a. The liner must:

1) Have a completed thickness of at least two feet and be constructed of soils having a hydraulic conductivity of 1×10^{-7} cm/sec or less upon completion of construction; or

2) Be made up of liner materials which achieved a hydraulic conductivity less than 1×10^{-7} cm/sec.

b. Surface water must be prevented from entering and passing through the stockpile site by constructing diversion structures, an elevated platform, or other devices. Diversions must be of sufficient height to prevent outside water from passing over them during snowmelt or rainfall events less than the 25-year, 24-hour storm event.

c. Where upgradient slopes are greater than two percent, clean water diversions must be constructed that surround at least the three upgradient sides of the stockpile site.

2. **Notifications**. The Permittee shall notify the MPCA, in accordance with Part IX.C, **at least three days before** beginning construction of the permanent stockpile site and **within three days** of completing construction. The notification may be done by letter, telephone, or facsimile and shall include the following:

a. Permit number;

b. Permittee's name;

c. Name of the Facility (if different than the Permittee's name);

d. Facility location by county, township, section, and quarter section; and

e. Name of the contractor responsible for installing the stockpile liner.

G. Feed Storage Areas.

The following conditions apply to all feed storage areas located on the Facility. The definitions for "Feed Storage Area" and "Feed Storage Area Runoff" can be found in APPENDIX A of this Permit

1. Permitting. The Owner/Operator of the Facility shall submit a permit application in accordance with Part IV.C of the Permit when a feed storage area is constructed or

expanded by adding additional area to the existing footprint of the feed storage areas. Construction or expansion of the proposed feed storage area shall not begin until the Owner/Operator has received approval from the MPCA.

2. Leachate that leaves the feed storage area shall be contained to prevent it from discharging to waters of the state in accordance with Part IX.A.1, of this Permit. Types of containment that may be used are listed in item 3.a-d below.

3. One or more of the following measures must be implemented to control runoff caused by precipitation events:

   a. A receiving tank that collects the leachate and runoff, and transfers this material to an existing or proposed LMSA located elsewhere at the Facility;

   b. A LMSA that is constructed specifically for the collection of the leachate and runoff from the feed storage area. Any LMSA used only to contain feed storage area leachate and runoff shall be designed, constructed, operated and maintained in accordance with all portions of Minn. R. 7020.2100 (except for the nine month storage requirement) and have a capacity that is equal or greater than the volume of feed storage areas runoff generated from a 25 year-24 hour storm event plus one foot of freeboard and the capacity required for storage between land application events;

   c. A vegetated infiltration area that is designed to:

      1) Meet the MPCA guidelines and NRCS practice standards for such structures and

      2) Effectively contain the 25 year-24 hour storm event;

   d. A comparable system that controls the leachate and runoff resulting from a 25 year-24 hour storm event, providing equal or greater runoff control and environmental protection as items a-c above; or

   e. An impervious cover (i.e. a roof or plastic sheet) over the feedstuffs that will prevent exposure of the feedstuffs to precipitation except during active removal of feedstuffs from the storage area. Any spillage of feedstuff outside of the area protected by the impervious cover shall be cleaned up on a daily basis.

4. When undergoing an expansion in the number of animals, Manure storage system, feed storage areas, or making major renovations or additions to the Facility, one of the feed storage area runoff controls identified in item 3.a-d shall be implemented. A permit application containing the plans and specifications for the runoff control area shall be submitted to the MPCA and construction of the runoff control area shall not begin until written approval from the MPCA has been received by the Owner/Operator.

5. The feed storage area shall be placed on an impermeable surface consisting of concrete, asphalt or at least one foot of soil categorized by NRCS practice standard 313 as group III or IV (20 to 100 percent passing the #200 sieve and a plasticity index of 11 or greater). If a soil pad is to be used for feed storage, a minimum of two feet of separation shall be maintained between the top surface of the soil pad and the seasonal high water table.

6. Manure or other waste products shall not be stored on the feed storage pad unless a runoff control practice is in place.

H. Stormwater Requirements Prior To, During, and After Construction Activities.

1. **Development of a Stormwater Pollution Prevention Plan (SWPPP).** For any construction activities which will disturb one or more acres of total land area, the Permittee shall develop and implement a SWPPP. The SWPPP shall meet the following requirements, including those found in Appendix C:

    a. The time frame for developing and implementing the SWPPP (Part I of Appendix C);

    b. Content of the SWPPP (Part II.A of Appendix C);

    c. The use of a temporary (or permanent) sediment basin(s) when disturbing 10 or more acres of soil that drain to a common location (Part II.B of Appendix C);

    d. The description of a permanent stormwater management system if the completed project will replace vegetation and/or other pervious surfaces with one or more acres of cumulative impervious surface (Part II.C of Appendix C); and

    e. Information pertaining to the operation and maintenance of any temporary or permanent stormwater controls that will be used during or after construction, including the long-term operation and maintenance of any permanent stormwater management system as required in item d.

2. **Submittal of SWPPP**. If construction activities will disturb three or more acres of total land area, the SWPPP is to be submitted with the permit application in accordance with Part IV of this Permit or as indicated in this Permit.

3. **Recordkeeping Requirements**. Records pertaining to the implementation and maintenance of the SWPPP, including any modifications of the SWPPP, required under Part II.A.10 of Appendix C shall be retained in accordance with Part VIII.A of this Permit.

I. Operation and Maintenance of Stormwater Controls at all Facilities

1. The Permitee shall develop and implement an O&M Plan that meets the requirements of federal regulations. The O&M Plan shall be submitted to the MPCA with the Permit application, in accordance with Part IV of this Permit, and shall include appropriate actions to prevent:

    a. Pollution, erosion, and sediment from leaving the Facility;

    b. Pollution caused by stormwater that comes into contact with pollutant sources found on the entire Facility, including the following areas ancillary to, but not included within the definition of, the Facility:

        1) Immediate access roads and rail lines used or traveled by carriers of raw materials, products, waste material, or by-products used or created by the Facility;

        2) Site used for handling material other than Manure;

        3) Refuse sites;

        4) Sites used for the storage and maintenance of material handling equipment; and

5) Shipping and receiving areas.

c. Discharges to waters of the state in excess of the effluent limitation established in IX.A.

2. **Recordkeeping Requirements**. Records pertaining to the implementation and maintenance of the stormwater controls required in this part shall be retained in accordance with Part VIII of this Permit.

J. Animal Mortalities

1. Animal mortalities shall not be disposed of in any LMSA.

2. The method of animal mortality disposal shall be operated and maintained in accordance with the animal mortality plan identified in Part IV.C of this Permit.

3. Animal mortalities shall be stored, handled, treated, or disposed of in such a manner as to:

   a. Not cause a discharge to surface or ground waters of the state; and

   b. Comply with all applicable requirements of the Board of Animal Health (Minn. R. ch. 1719).

4. **Recordkeeping Requirements**. Records of the mortality management and practices used at the Facility to comply with items 1-3 shall be retained in accordance with Part VIII.A of this Permit.

K. Ambient Air Quality Standard Exemption for Removal of Manure

1. The Facility shall be exempt from ambient air quality standards during agitation and removal of Manure from the Facility for land application. The Facility will only be exempt from ambient air quality standards if the Facility owner/operator has previously notified the MPCA in writing prior to starting the agitation and removal of Manure. The maximum cumulative exemption in a calendar year shall not exceed 21 days. The notification shall be done in accordance with Part IX.C and may be done by letter, electronic mail, or facsimile.

2. The notice required in item 1 must include the following:

   a. The names of the owners or the legal name of the Facility;

   b. The location of the Facility by county, township, section, and quarter section;

   c. The Facility's registration number; and

   d. The anticipated start date and the anticipated number of days of removal of Manure from the barns or Manure storage areas.

3. **Recordkeeping Requirements**. The Owner/Operator shall retain records of the written requests for exemption to the ambient air quality standards during Manure removal in accordance with VIII.A of this Permit.

VII. Closure

A. Definitions.

For purposes of this Permit the following definitions shall apply:

1. **"Closure"** refers to the cessation of use of all or any part of the Facility, including:

    a. The removal of livestock or poultry from all or any of the animal holding areas located within the production area; and

    b. The discontinuation of a structure or area located within the production area to handle, store, or treat Manure.

2. **"Temporary Closure"** refers to closure of all or part of a Facility for one or more years with the intent of reusing the Facility or portion of the Facility at a future date.

3. **"Permanent Closure"** refers to closure of all or any part of the Facility with the intent that the animal holding area(s) and/or Manure storage area(s) will no longer be used for that purpose.

B. General Closure Requirements

1. The Permittee is responsible for closure and post-closure care of any portion of the Facility that has been temporarily or permanently closed.

2. All Manure and Manure-contaminated soils removed from any area that is permanently or temporarily closed shall be land applied in accordance with the terms and conditions of Part V of this Permit.

C. Temporary Closure

1. The Permittee shall maintain permit coverage for the entire Facility, including that portion which is temporarily closed.

2. Within one year of closure, the Manure shall be removed from all barns, open lots, and solid Manure storage areas that have been temporarily closed and land applied.

3. Within one year of closure, the Manure shall be removed from any LMSA that has been temporarily closed and land applied, except that a two-foot depth of Manure and/or water shall be left in poured concrete pits that are located below a barn to provide protection from damage caused by freezing temperatures.

4. Any LMSAs that are temporarily closed shall be maintained in accordance with the MPCA approved O&M Plan required under Part IV.C of this Permit.

5. For all LMSAs that collect precipitation, over-flow of the structure shall be prevented by maintaining the greater capacity of either:

    a. The capacity for a 25-year, 24-hour storm event; or

    b. A freeboard depth of not less than one foot.

6. Any LMSA that has been unused for three years or more shall, prior to using the structure for storing Manure, have a design engineer evaluate and prepare a report on the condition of the liner. The report shall be submitted to the MPCA for review and approval prior to using the structure.

7. The Permittee shall include a statement within the Annual Report, required to be submitted to the MPCA in accordance with Part VIII.A.3.b, details pertaining to the temporary closure of any portion of the Facility. This statement shall identify:

    a. Which animal housing and/or Manure storage area(s) has been temporarily closed;

    b. The date that each area(s) was closed;

    c. Any actions taken to prevent the closed area(s) from discharging to waters of the state (i.e. removal of Manure from barns, open lots, and Manure storage areas, or control of overflows from open air LMSAs as a result of precipitation events); and

    d. The land application of Manure and Manure-contaminated soil removed from any part of the closed facilities shall be reported in the land application portion of the annual report.

D. Permanent Closure

Within one year after ceasing operation of any part of the Facility, the Permittee shall take the following measures:

1. Remove Manure from all animal holding and Manure storage areas where operation has ceased.

2. **Earthen-floored Animal Holding Areas and Permanent Stockpile Sites.** Remove all Manure-contaminated soils from any animal holding area with earthen floors or permanent stockpile sites where operation has ceased. As soon as practicable after removing the Manure-contaminated soils, reduce soil nitrogen on the areas by growing alfalfa, grasses, or other perennial forage for at least five years.

3. **Earthen-lined LMSAs.** Remove all Manure-contaminated soils from any earthen-lined LMSAs where operation has ceased. After removal of the Manure-contaminated soils the basin may be either:

    a. Filled with clean fill material with the top soil mounded to allow for settling of the fill material and divert precipitation from pooling in the area; or

    b. Left open to act as a duck pond or other purpose. If this option is selected, the basin shall not be used to store Manure or any other waste material without approval of the MPCA.

4. Where the discontinued animal housing or Manure storage area shall be covered with fill material or another structure, the Permittee shall notify the MPCA, in accordance with Part IX.C, at least three business days prior to filling or covering over the area that has been cleaned of Manure and Manure-contaminated soils.

5. Within 60 days after final closure, submit a certified letter to the MPCA, in accordance with Part IX.C, stating the animal holding area and/or Manure storage area has been closed according to the requirements in items 1 to 4 above. The letter must identify the

location of the Facility or Manure storage area by county, township, section, and quarter section.

VIII. Recordkeeping and Reporting

Recordkeeping refers to the information that the Permittee is required to collect and retain on site regarding the construction, operation, and maintenance of the Facility.

Reporting refers to the information that the Permittee is required to submit to the MPCA regarding the construction, operation, and maintenance of the Facility.

A. Recordkeeping Requirements

1. **Records Retention**. The Permittee shall retain all records required by the conditions of this Permit for a minimum of **six years.** These retention periods shall be automatically extended during the course of any legal or administrative proceedings or when so requested by the MPCA. Records shall be maintained at the Facility or at the Permittee's business address.

2. **Record Availability**. The Permittee shall make these records available for examination and copying upon request of the MPCA or designated county feedlot pollution control officer (CFO) and shall, upon request, submit these records to the MPCA or CFO within **30 days**.

3. The following is a summary of the records that are to be maintained by the Permittee for activities pertaining to the operation and maintenance of the Facility, in accordance with the referenced part of this Permit:

   a. ***General Facility Records***

      1) Land application of Manure in accordance with Parts V.B.6 and V.C.3;

      2) Inspections of the Facility and any corrections made as a result of the inspections in accordance with Part VI.A.12;

      3) The design of any Manure storage or manure-contaminated runoff containment areas in accordance with Part VI.B.5;

      4) Animal mortality disposal in accordance with Part VI.J.4;

      5) Requests for exemption from the ambient air quality standards during removal of Manure in accordance with VI.K.3;

      6) Rainfall dates and amounts must be recorded for all rainfall events at any Facility where Manure or raw material, intermediate product, or final product storage is exposed to rainfall. The Permittee may alternatively satisfy this requirement by directing the MPCA to data maintained by governmental agencies or educational institutions; and

      7) Facility maintenance activities including:

         a) A description of any modifications in the Manure collection, containment, and storage facilities. This description shall include, but not be limited to,

any damage and repair of the Manure storage, containment, or handling facilities.

b) Any substantial changes in management or operating procedures including, but not limited to, changes related to improvements in runoff control and confinement barns.

c) Any significant activities that alter the nature of the Facility or that would increase the likelihood of Manure-contaminated runoff from the Facility or potential for groundwater pollution; and

d) Any other factors affecting compliance with the conditions of this Permit and such information as the MPCA may reasonably require of the Permittee pursuant to Minn. R. 7020 and Minn. Stat. §§ 115 and 116, as amended.

b. ***LMSA Records***

1) Inspection of any LMSAs in accordance with Part VI.C.6.

c. ***Solid Manure Records***

1) Any short-term stockpiling in accordance with Part VI.E.1.b.5); and

2) Any composting activities in accordance with Part VI.E.2.e.

d. ***Stormwater Records***

1) Any SWPPP, modifications to the SWPPP, inspection and maintenance records, and calculations for design of temporary and/or permanent stormwater management systems, in accordance with Part VI.H.3. and Appendix C of this Permit.

B. Reporting Requirements.

1. **Reporting Address**. All reports required to be submitted herein shall be submitted to the MPCA in accordance with Part IX.C.

2. **Report Signatory Requirements**. All required reports submitted to the MPCA shall be signed following the signatory requirements of VIII.D below.

3. **Report Retention**. The Permittee shall retain all reports required by this Permit for a period of **six years**.

4. **Annual Reporting**. **By March 1** of each year, the Permittee shall submit to the MPCA an annual report for the following activities pertaining to the operation and maintenance of the Facility which occurred in the previous calendar year or otherwise specifically indicated:

a. ***General Annual Report Components***

1) The number and type of animals at the Facility, whether in open confinement or housed under roof;

2) Production and handling of Manure including:

a) Amount of Manure in tons and/or gallons generated by the Facility;

b) Amount of Manure in tons and/or gallons transferred to another person(s) from the Facility on a monthly basis in the cropping year that ended during the previous calendar year;

c) Total number of acres for land application covered by the MMP for the cropping year that began in the previous calendar year;

d) Total number of acres under control of the Facility that were used for land application of Manure in the cropping year that ended in the previous calendar year;

e) A statement indicating whether the current version of the Facility's MMP was developed or approved by a certified nutrient management planner, NRCS technical service provider for nutrient management, or any other type of certified nutrient management planner. This Permit does not require the use of a certified plan writer for development of the MMP.

f) Land application records for the cropping year that ended the previous calendar year when Manure ownership has not been transferred. These records shall include the items listed in Part V.B.6.a-i; and

g) Any emergency land application of liquid Manure during winter conditions in accordance with V.B.4.b.2)d).

3) Any information regarding the permanent or temporary closure of any portion of the Facility in accordance with Part VII.C.7;

4) Summary of all Manure discharges from the Facility that have occurred in the previous calendar year, including:

a) Date and time the discharge began, or if the discharge was detected after it began, give an estimate of the date and time when the discharge occurred;

b) The location of the discharge to waters of the state including the name of the waterbody and a description of where the Manure entered the waterbody;

c) A description of the discharge including the source, cause, composition and observed impacts; and

d) An estimated volume of the discharged Manure (in gallons or tons);

5) A summary of any instances of noncompliance with this Permit that have occurred in the previous calendar year that have not been reported, including:

a) Description of the noncompliance and its cause;

b) The period that the Facility was in noncompliance with the permit conditions, including exact dates and times;

c) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

d) A description of the steps taken to reduce, eliminate, and prevent reoccurrence of the noncompliance.

b. ***LMSA Annual Report Components***

1) Damage and repair of any part of any LMSA in accordance with Part VI.C.7.

c. ***Solid Manure Annual Report Components***

1) Any Manure composting activities in accordance with Part VI.E.2.f.

5. **LMSA Construction Report**. **Within 60 days** of completing construction of a LMSA, the Permittee shall submit the certification from the design engineer in accordance with Part VI.D.6 of this Permit.

C. Report of Discharge or Bypass

1. Any discharge or bypass of Manure, process wastewater, animal waste, washwater, drinking water overflow, or Manure-contaminated runoff from the **production area** that is out of compliance with Permit conditions or results in, or has the potential to result in, a discharge to the waters of the state, including drainage ways, ditches, and dry runs, shall be reported to the Minnesota Department of Public Safety Duty Officer toll-free at 800-422-0798, *and* the MPCA by telephone, in accordance with Part IX.E.6.a no later than 24 hours after the event(s) started.

2. Any discharge or bypass of Manure, process wastewater, animal waste, washwater, drinking water overflow, or Manure-contaminated runoff from the **land application area** that does not occur as a result of a precipitation event when Manure was applied in accordance with the MPCA-approved MMP shall be reported in accordance with Part V.B.7.b. Notifications shall be done no later than 24 hours after the event(s) started and shall be made to the Minnesota Department of Public Safety Duty Officer toll-free at 800-422-0798, *and* the MPCA by telephone, in accordance with Part IX.E.6.a.

3. Within five days of the discharge or bypass, the Permittee shall provide the MPCA, in accordance with Part IX.E.6.b, with a written statement that includes the following information:

   a. Cause of discharge or bypass such as precipitation (inches of rain or snow per day) or other cause (e.g., structural failure, equipment breakdown);

   b. A description and approximate volume of any discharge or bypass;

   c. Location and name, if available, of the waterway, dry ditch, gully, creek, stream, pond, lake, river, or other waters of the state receiving the discharge or bypass;

   d. Corrective steps being taken to reduce or eliminate and prevent a recurrence of the discharge or bypass;

   e. The period of the discharge or bypass including exact dates and times and, if the discharge or bypass is still occurring, the anticipated time the discharge or bypass will continue; and

   f. Name of person reporting the discharge or bypass.

D. Signatory Requirements

The Permittee shall comply with the signatory requirements as follows:

1. All reports required by this Permit and other information requested by the MPCA shall be signed and certified by the Permittee or by a duly authorized representative. A person is a duly authorized representative only if:

    a. The authorization is made in writing by the Permittee or owner(s) and submitted to the MPCA; and

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated Facility.

2. Any person signing a document under this section shall make the following certification:

    "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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."

3. The Permittee shall not knowingly make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the MPCA by this Permit. The Permittee shall immediately upon discovery report to the MPCA an error or omission in these records, reports, plans, or other documents.

IX. General Conditions

A. Effluent Limitations

Except as provided in items 1 and 3 below, there must be no discharge of Manure pollutants into waters of the state from the production area or land application sites.

1. There must be no discharge of Manure pollutants into waters of the state from the production area except whenever precipitation events cause an overflow of Manure. Pollutants in the overflow may be discharged to waters of the state provided that the conditions in items a-c below apply:

    a. The production area for any new source swine, poultry or veal Facility is designed, constructed and maintained to be a "no discharge" system;

    b. The production area for any Facility not identified by item a above is designed, constructed, and maintained to contain all Manure, including the runoff and the direct precipitation from a 25-year, 24-hour storm; and

    c. The production area is:

        1) Operated in accordance with Part VI of this Permit; and

        2) The recordkeeping requirements of Part VIII.A are met.

2. The Permittee shall ensure that all discharges associated with the production area do not cause or contribute to non-attainment of applicable state water quality standards.

3. The land application sites are managed in accordance with Minn. R. ch. 7020.2225, the Permittee's MMP, and Part V of this Permit.

4. The Permittee shall ensure that all discharges associated with the production area and land application of Manure under the ownership, operation, or control of the Permittee, do not cause or contribute to non-attainment of applicable state water quality standards.

5. The Permittee shall ensure that all stormwater that comes into contact with the ancillary areas listed in Part VI.C does not cause or contribute to non-attainment of applicable state water quality standards.

B. Discharges

In the event of a discharge due to a storm event, as specified in Part IX.A.1.a, from chronic or catastrophic precipitation, from a discharge from a land application site, or any discharge due to non-compliance with the conditions of this Permit, the Permittee shall report the discharge in the manner required under Part VIII.B.4.b.

C. Submittals to MPCA

1. The Permittee shall submit all notifications, reports, and other correspondence required to be sent to the MPCA by a condition of this Permit to the address, facsimile number, or telephone number indicated on the cover letter of this Permit.

2. Written submittals shall comply with the signatory requirements of Part VIII.D.

3. The Permit number should be indicated on all correspondence with the MPCA.

D. Facility or Ownership Changes

1. **Change in Facility by Permittee**. Prior to constructing a new or expanded animal housing area or Manure storage area, increasing the animal unit capacity for which this Permit was issued, or significantly altering the method used to manage the Manure, the Permittee shall submit a permit application to the MPCA for a permit modification. The Permittee is to receive written approval from the MPCA before the Facility is modified or expanded, except for any modifications for which this Permit was originally issued.

   The permit application may be submitted at any time. However, it is recommended that the permit application be submitted at least 180 days before the planned starting date of the modification or expansion.

   The permit application must be accompanied by updates to the plans required by Part IV.C. that are affected by the modification to the Facility.

   The modification of the MMP in accordance with Part V.A.3. and the incorporation of the MMP modifications as an enforceable part of this Permit shall not require the Permittee to apply for a change to this Permit

2. **Transfer of Ownership or Control**. No permit may be assigned or transferred by the Permittee without the written approval of the MPCA. In the event of any changes in control or ownership of the Facilities, a request for permit transfer and/or permit

application form, signed by both parties, shall be sent to the MPCA at the address listed on the cover letter of this Permit. The permit application must be accompanied by updates to the plans required by Part IV.C that are affected by the change in ownership or control. Any succeeding owner/operator shall also comply with the terms and conditions of this Permit. This request will be handled in accordance with Minn. Stat. § 116.07. If a Facility changes ownership or control without an assignment of the Permit, the original Permittee may still be held liable for violations of the Permit and the new owner/operator may be held liable for operating without a permit.

3. **Permit Modification by MPCA**

   a. After notice and opportunity for a hearing, this Permit may be modified, suspended, or revoked in accordance with Minn. R. 7001.0170 through 7001.0190.

   b. The MPCA reserves the right to require the submittal of revisions to any of the plans outlined in Part IV.C of this Permit for review and approval in the event that this Permit is modified, suspended, or revoked under item a above. Any amendments to the required plans must be consistent with the conditions of this Permit and any applicable state or federal rules.

4. **Permit Reissuance**

   a. The Permittee shall provide a complete permit application for reissuance of this Permit to the MPCA at least 180 days before the Permit expiration date identified on page 1.

   b. If the Permittee has provided a timely application for Permit reissuance, the Permittee may continue to conduct the activities authorized by this Permit, in compliance with the requirements of this Permit, until the MPCA takes final action on the application, unless the MPCA determines that any of the following are true:

      1) The Permittee is not in substantial compliance with the requirements of this Permit, nor with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this Permit.

      2) The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the Permit expiration date identified on page 1.

      3) The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies.

E. Other General Conditions

1. **Reopening Clause**. This Permit may be reopened and modified, or alternatively, revoked and reissued, to comply with any applicable standards or requirements not currently covered by this Permit or any future standard or requirement promulgated by state or federal authority for the regulation of concentrated animal feeding operations.

2. **Duty to Prevent and Mitigate**. The Permittee shall take all reasonable steps to prevent discharges and to minimize any adverse impact to waters of the state resulting from unauthorized discharges, accidental or otherwise. If the Permittee discovers, through any means, including notification by the MPCA, that noncompliance with a condition of the

Permit has occurred, the Permittee shall take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance.

3. **System Reliability**. The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes at all times, including maintaining sufficient storage capacity in accordance with applicable provisions of 40 CFR Part 412. The Permittee is responsible for ensuring system reliability by means of alternate power sources, back-up systems, storage of inadequately treated effluent, or other appropriate methods of maintaining system reliability.

4. **Need to Halt or Reduce Activity Not a Defense**. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

5. **Upset Defense**. If the Permittee wishes to establish an affirmative defense to a MPCA enforcement action due to an upset, the Permittee shall demonstrate compliance with Minn. R. 7001.1090, subp. 3 L, including the following:

   a. The specific cause of the upset;

   b. That the upset was unintentional;

   c. That the upset resulted from factors beyond the control of the Permittee and did not result from operational error, improperly designed or inadequate Manure storage basin(s) or other facility and treatment works, lack of preventive maintenance, or increases in production that exceed the design basin capacity for the Facility;

   d. That the Facility was being properly operated at the time of the upset;

   e. That the Permittee notified the Minnesota Department of Public Safety Duty Officer toll-free at 800-422-0798 or 651-649-5451, no later than 24 hours after the upset started;

   f. That the Permittee took all reasonable steps to minimize harm to human health, public drinking water supplies, and the environment resulting from the upset; and

   g. The Permittee shall provide a written report of any upset within 30 days of the upset.

6. **Non-Compliance Notification**. If, for any reason, the Permittee does not comply with, or will be unable to comply with, any term or condition specified in this Permit, the Permittee shall notify the MPCA as follows:

   a. ***Telephone Communication***. Report the type of discharge or other violation immediately to the MPCA at the telephone number indicated on the cover letter for this Permit or the Minnesota Duty Officer at 800-422-0798.

   b. ***Written Notification of Deviations Endangering Human Health or the Environment***. Report to the MPCA, in writing, any violation of Permit conditions that could endanger human health, drinking water supplies, or the environment, no later than five days after the violation occurred. The report shall include the following:

1) Descriptions of the noncompliance approximate volume and cause of noncompliance.

2) The period of noncompliance, including exact dates and times, when and how the noncompliance was corrected, or if not corrected, the anticipated time the noncompliance is expected to continue, and the steps that will be taken to correct, reduce, eliminate, and prevent recurrence of the noncompliance.

c. ***Completion Report***. Report to the MPCA, in writing, what corrective actions have been taken to reduce, eliminate, and prevent the recurrence of the noncompliance and describe in detail what was done to accomplish this. This report shall be submitted to the MPCA within 30 days of the noncompliance.

7. **Right of Entry**. The Permittee shall, pursuant to Section 308 of the Act and Minn. Stat. §§ 115.04, (1998); 115B.17, subd. 4; and 116.091, allow the MPCA, employees of the MPCA, and authorized representatives of the MPCA or U.S. Environmental Protection Agency upon presentation of credentials:

   a. To enter upon the Permittee's Facility where a production area or Manure storage system is located or where the Facility's Manure is land applied for the purpose of obtaining information, examination of records, or conducting surveys or investigations;

   b. To bring such equipment upon the Permittee's premises as is necessary to conduct such surveys and investigations;

   c. To examine and copy any books, papers, records, or memoranda, pertaining to the installation, maintenance, or operation of the Facility including, but not limited to, monitoring data, operation and maintenance, or records required to be kept under the terms and conditions of this Permit;

   d. To inspect any monitoring equipment or monitoring procedures required in this Permit; and

   e. To sample and monitor any substances or parameters at any location.

8. **Civil and Criminal Liability**. Nothing in this Permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance with the terms and conditions provided herein.

9. **Property Rights**. The issuance of this Permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or rules.

10. **Severability**. The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

11. **Liability Exemption**. This Permit authorizes the Permittee to perform the activities described herein under the conditions set forth. In issuing this Permit, the state/Agency assumes no responsibility for any damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those

activities authorized, directed, or undertaken pursuant to this Permit. To the extent the state/Agency may have any liability for the activities of its employees, that liability is explicitly limited to that provided in the Torts Claim Act, Minn. Stat. § 3.736.

12. **NPDES Permit Rules**. The Permittee shall comply with the provisions of Minn. R. 7001.0150, subp. 3, and 7001.1090, subp. 1. This Permit requires the submittal of annual reports in lieu of discharge monitoring reports as the Permittee is not authorized to discharge to surface and/or ground waters.

13. **Minnesota Laws**. Nothing in this Permit shall be construed to preclude the institution of any legal or administrative proceedings or relieve the Permittee from any responsibilities, liabilities, or penalties for violation of effluent and water quality limitations not included in this Permit.

14. **Other Statutes, Rules, and Ordinances**. The MPCA's issuance of this Permit does not release the Permittee from any liability, penalty, or duty imposed by Minnesota or federal statutes or local ordinances except the obligation to obtain the Permit.

15. **More Stringent Rules**. The MPCA's issuance of this Permit does not prevent the future adoption by the Agency of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee.

16. **Agency Obligation**. The MPCA's issuance of this Permit does not obligate the Agency to enforce local laws, rules, or plans beyond that authorized by Minnesota statutes.

17. **Reports**. The Permittee shall, when requested by the MPCA, submit, within a reasonable time, the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the Permit or regarding the conduct of the activity covered by the Permit.

18. **Availability of Reports**. Except for data determined to be confidential under Minn. Stat. § 116.075, subd. 2, all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the MPCA. Procedures for submitting such confidential material shall be pursuant to Minn. R. 7000. Monitoring data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Minn. Stat. § 115.071, subd. 2.

19. **False Information**. The Permittee shall not make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the MPCA by the Permit. The Permittee shall immediately, upon discovery, report to the MPCA an error or omission in these records, reports, plans, or other documents.

APPENDIX A

DEFINITIONS FOR LIVESTOCK PRODUCTION PERMIT

This Appendix contains the definitions of the terms used in this State of Minnesota Livestock Production Permit.

1. **"Act"** means the federal Clean Water Act, as amended, 33 U.S. Code 1251, et seq.

2. **"Agency"** means the Minnesota Pollution Control Agency, as constituted pursuant to Minn. Stat. § 116.02, subd. 1.

3. **"Agency Staff"** means the staff of the Minnesota Pollution Control Agency.

4. **"Agricultural Stormwater Discharge"** means a discharge composed entirely of stormwater, as defined in the Code of Federal Regulation (§122.26(a)(13)), from a land area upon which Manure and/or process wastewater has been applied in accordance with Part V of this Permit.

5. **"Agricultural Wellhead"** means any water supply well used for agricultural purposes, including irrigation and watering of livestock.

6. **"Animal Feeding Operation" ("AFO")** means a lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility [40 CFR § 122.23(b)(1)].

7. **"Animal Feedlot"** means a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosures. For the purposes of this Permit, open lots used for the feeding and rearing of poultry (poultry ranges) shall be considered to be animal feedlots. Pastures shall not be considered animal feedlots under this Permit.

8. **"Animal Manure"** or **"Manure"** means poultry, livestock, or other animal excreta or a mixture of excreta with feed, bedding, precipitation, or other materials.

9. **"Animal Unit"** means a unit of measure used to compare differences in the production of animal Manure and set forth in Minn. R. pt. 7020.0300, subp. 5.

10. **"Best Management Practices" ("BMPs")** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

11. **"Bypass"** means an intentional diversion of a waste stream from any portion of the Facility.

12. **"Catastrophic Rainfall Event"** means an equal or greater quantity of precipitation than the 25-year, 24-hour rainfall event in a 24 hour or lesser period of time occurring during a natural catastrophe including, but not limited to, tornadoes, hurricanes, or other catastrophic conditions

that would cause an overflow from the waste retention structure that is designed, constructed, operated, and maintained to meet all the requirements of this Permit.

13. **"Chronic Rainfall Event"** means an amount of rainfall within a 14-day period as great or greater than the 25-year, 24-hour rainfall event and which precludes field access or land application of manure or process wastewater without runoff or ponding.

14. **"Coarse-textured Soil Land"** means fields that have at least 33 percent of the surface soil and/or subsoil (within three (3) feet of the surface) with one of the following soil texture types: sand, loamy sand, loamy coarse sand, fine sand, loamy fine sand, coarse sand, or very fine sand.

15. **"Commencement of Construction"** means to begin or cause to begin, as part of a continuous program, the placement, assembly, or installation of facilities or equipment; or to conduct significant site preparation work, including clearing excavation or removal of existing buildings, structures, or facilities, necessary for the placement, assembly, or installation of facilities; or equipment at a new or expanded animal feedlot or a new, modified, or expanded manure storage area.

16. **"Commissioner"** means the Commissioner, or other MPCA staff authorized by the Commissioner, of the MPCA, as described in Minn. Stat. § 116.03, as amended.

17. **"Concentrated Animal Feeding Operation" ("CAFO")** means an AFO that is defined as a Large CAFO or as a Medium CAFO by the terms of 40 CFR § 122.23(b)(2), or that is designated as a CAFO in accordance with 40 CFR § 122.23(c). Appendix B contains the criteria for determining a Large CAFO.

18. **"Corrective or Protective Measure"** means a practice, structure, condition, or combination thereof that prevents or reduces the discharge of pollutants from an animal feedlot or manure storage area to a level in conformity with MPCA rules.

19. **"County Feedlot Officer"** means an employee or officer of a delegated county who is knowledgeable in agriculture and who is designated by the county board to perform the duties under Minn. R. 7020.1600.

20. **"Delegated County"** means a county that has applied for and received authorization pursuant to Minn. R. 7020.1600, subp. 3, item C, to implement an animal feedlot program.

21. **"Design Engineer"** means a professional engineer licensed in the state of Minnesota or a Natural Resources Conservation Service (NRCS) staff person having NRCS approval authority for the project.

22. **"Discharge"** means the addition of a pollutant to waters of the state, including a release of animal Manure or process wastewater from an animal holding area, Manure storage area, or a Manure land application site by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching, or any other means. Discharge includes both point source and nonpoint source discharges.

23. **"Emergency Applications"** means land application that is necessary to prevent Manure storage overflows at a site that is designed, constructed, and managed to contain Manure for a minimum of 180 days, and where other options for additional temporary Manure storage are not feasible.

24. **"Expansion"** or **"Expanded"** means construction or any activity that has resulted or may result in an increase in the number of animal units that an animal feedlot is capable of holding or an increase in storage capacity of a manure storage area.

25. **"Feed Storage Area"** means a designated area at the production facility, paved or unpaved, covered or uncovered, that is utilized for storage of any materials used to create the rations for livestock. Also included are those areas used to store spoiled, spilled, or other unused rations for livestock. For purposes of this Permit, "feed storage area" does not include buildings or roofed structures that contain dry commodities, provided that precipitation does not come into contact with the commodities stored inside the structure. Runoff from the roofs of these structures is considered "clean water" and does not require containment/storage, unless it is allowed to come into contact with process wastewater or Manure. "Feed storage areas" also do not include areas used for the storage of hay bales and other absorbent materials which do not create contaminated leachate and do not create a pollution hazard.

26. **"Feed Storage Area Runoff"** means liquid that leaves the feed storage area that is the result of precipitation on the feedstocks or on the surrounding feed storage area where residual feed is present. This does not include water that flows off of the tarp/roof of a feed storage, unless that liquid is allowed to come into contact with feedstocks, residual feed, or other liquid that has come into contact with feedstocks or residual feed. This liquid is not stormwater and should not be allowed to directly enter waters of the state, tile intakes, or stormwater collection/mitigation area (stormwater ponds, etc.)

27. **"Floodplain"** means the areas adjoining a watercourse that have been or hereafter may be covered by a large flood known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

28. **"Flow Distance"** means the distance runoff travels from the source of the runoff to waters of the state.

29. **"Incorporation"** means applying Manure using injection, disking into the soil, tilling the soil after application, or using other practices that result in a majority of the Manure being placed below the ground surface within 24 hours of application and prior to rainfall.

30. **"Intermittent Stream"** means all watercourses identified as intermittent streams on United States Geological Survey quadrangle maps.

31. **"Land Application Area"** means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, to which Manure, litter, or process wastewater from the production area is or may be applied.

32. **"Liquid Manure Storage Area" ("LMSA")** means an area where animal Manure or process wastewater that is in a liquid form is stored or processed.

33. **"Manure-contaminated Runoff"** means a liquid that has come into contact with animal Manure and drains over land from any animal feedlot, Manure storage area, or animal Manure land application site.

34. **"Manure Source"** means a Manure storage area that is generated from distinctly separate animal types, animal management, feed management, watering management, and/or Manure management systems. Two separate Manure storage areas with identical animal types,

animal management, feed and watering practices, and Manure management are considered as one Manure source.

35. **"Manure Storage Area"** means an area where animal Manure or process generated wastewater are stored or processed. Short-term and permanent stockpile sites and composting sites are Manure storage areas. Animal Manure packs or mounding are not Manure storage areas provided they are managed in accordance with Minn. R. 7020.2000, subp. 3.

36. **"MPCA"** means the Minnesota Pollution Control Agency or Minnesota Pollution Control Agency staff as delegated by the Minnesota Pollution Control Agency.

37. **"New Animal Feedlot"** means an animal feedlot or Manure storage area constructed, established, or operated at a site where no animal feedlot or Manure storage area existed previously or that existed previously and has been unused for five years or more.

38. **"National Pollutant Discharge Elimination System Permit"** or **"NPDES"** means a permit issued by the MPCA for the purpose of regulating the discharge of pollutants from point sources including concentrated animal feeding operations (CAFOs).

39. **"Overflow"** means the discharge of manure or process wastewater resulting from the filling of wastewater or Manure storage structures beyond the point at which no more Manure, process wastewater, or stormwater can be contained by the structure, as defined in 40 CFR § 412.2(g).

40. **"Owner"** or **"Owners"** shall mean all persons having possession, control, or title to an animal feedlot or Manure storage area as defined by Minn. R. 7020.0300, subp. 17.

41. **"Pastures"** means areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetation cover is maintained during the growing season except in the immediate vicinity of temporary supplemental feeding or watering devices.

42. **"Permanent Stockpiles"** means a solid Manure storage area where Manure is stored or processed that does not meet the requirements of Minn. R. 7020.2125, subp. 2, for Short-term Stockpiles.

43. **"Permittee"** means the owner or owners or any person or group of persons including, but not limited to, a single individual, manager, partnership, limited partnership, cooperative, or any form of corporate entity that has part or all of the responsibility for the feedlot and is identified in the MPCA cover letter for the Permit.

44. **"Pollutants, Toxic Pollutants, Other Wastes, Point Source, Disposal System,"** and other terms for the purpose of this Permit are defined in Section 502 of the Act; Minn. Stat. § 115.01, as amended; or Minn. R. 7001.

45. **"Probability of Rainfall"** means National Weather Service statistical predictions (may be found at the website: http://www.weather.gov/mdl/synop/products.php).

46. **"Process Wastewater"** means waters and/or precipitation, including rain or snow, which comes into contact with Manure, litter, bedding, or other raw material or intermediate or final material or product used in or resulting from the production of animals, poultry, or direct products such as milk or eggs.

47. **"Production Area"** means that part of the animal feeding operation that includes the animal confinement area, the Manure storage area, the raw materials storage area, and the waste

containment areas, as defined in 40 CFR § 412.2(h). The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The Manure storage area includes, but is not limited to, lagoons, runoff ponds, storage sheds, stockpiles, under-house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed silos, silage bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins and areas within berms and diversions which separate uncontaminated stormwater. Also included in this definition of production area is any egg washing or egg processing facility and any area used in the storage, handling, treatment, or disposal of mortalities.

48. **"Shoreland"** means land, as defined in Minn. Stat. § 103F.205, subd. 4, located within 1,000 feet from the normal high water mark of a lake, pond, or flowage and 300 feet of a river or stream or the landward side of floodplain delineated by ordinance on such a river or stream, whichever is greater.

49. **"Short-term Stockpile"** means a Manure storage area where Manure is stored or processed according to Minn. R. 7020.2125, subps. 1 to 3.

50. **"Sinkhole"** means a surface depression caused by a collapse of soil or overlying formation above fractured or cavernous bedrock.

51. **"Special Protection Area"** means land that is within 300 feet of all protected waters (lakes and streams) and protected wetlands, identified on Department of Natural Resources (DNR) protected waters and wetlands maps and intermittent streams and ditches identified on United States Geological Survey (USGS) quadrangle maps, excluding drainage ditches with berms and segments of intermittent streams which are grassed waterways.

52. **"State Disposal System Permit"** or **"SDS Permit"** means a state permit that may be processed in accordance with Minn. R. 7001.0040; 7001.0050; 7001.0100, subps. 4 and 5; and 7001.0110.

53. **"Transferred Manure Ownership"** means Manure applied onto land that the Facility owner/operator does not own, lease, rent, or have access to under an access agreement, and control of Manure applications, including rate and timing, does not lie with the Facility owner/operator or employees of the Facility owner/operator.

54. **"25-Year, 24-Hour Rainfall Event"** shall mean the maximum 24-hour rainfall event, expressed in inches, with a probable recurrence interval of once in 25 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent addendums or equivalent regional or state rainfall probability information developed therefrom.

55. **"Waters of the State"** means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portions of the state.

APPENDIX B

CRITERIA FOR DETERMINING A CONCENTRATED ANIMAL FEEDING OPERATION [EXCERPTED FROM TITLE 40, CODE OF FEDERAL REGULATIONS, § 122.23(B)(4)]

"An animal feeding operation (AFO) is defined as a large concentrated animal feeding operation (CAFO) if it stables or confines as many as or more than the numbers of animals specified in any of the following categories:

i). 700 mature dairy cattle, whether milked or dry;
ii). 1,000 veal calves;
iii). 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
iv). 2,500 swine each weighing 55 pounds or more;
v). 10,000 swine each weighing less than 55 pounds;
vi). 500 horses;
vii). 10,000 sheep or lambs;
viii). 55,000 turkeys;
ix). 30,000 laying hens or broilers if the AFO uses a liquid manure handling system;
x). 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
xi). 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
xii). 30,000 ducks (if the AFO uses other than a liquid manure handling system); and
xiii). 5,000 ducks (if the AFO uses a liquid manure handling system)."

APPENDIX C

STORMWATER, SOIL EROSION, AND SEDIMENT CONTROL REQUIREMENTS FOR LIVESTOCK AND POULTRY NPDES/SDS PERMITS

The requirements contained in this document apply to all livestock and poultry facilities in Minnesota that obtain coverage under a general or individual National Pollutant Discharge Elimination System (NPDES) / State Disposal System (SDS) permit. These requirements pertain to erosion and sediment control in accordance with 40 CFR § 122.26 and pertain to construction activities as well as operational conditions at the Facility. Facility Owners that follow the criteria outlined in this document when applying for an individual or general livestock and poultry NPDES/SDS permit will not be required to apply for a separate general stormwater NPDES/SDS permit.

For purposes of this document, all reference to construction activity includes both small construction activity and construction activity.

I. Obtaining Coverage

A. Stormwater Pollution Prevention Plan

1. The **Owner** must develop a Stormwater Pollution Prevention Plan (SWPPP) according to Part II. of this Appendix to the Permit (Appendix).

2. The SWPPP is to be submitted by the Owner to the MPCA as an attachment to the permit application, or as identified in this Permit.

3. The SWPPP shall be retained by the Owner under the recordkeeping requirements of the Owner's Permit.

B. The commencement of any construction activity (e.g., land disturbing activities) is prohibited until approval has been received through a permit or alternate form of MPCA approval.

C. For use of the Alternative Method(s) for the permanent stormwater management system outlined under Part II.C., item 4, the Owner must submit a completed SWPPP to the MPCA for review and approval at least 90 days prior to the proposed starting date of construction activity.

1. The MPCA will notify the Owner within the 90-day period, in writing, whether the alternative method is approved or not approved and, if applicable, the basis for denial.

2. The Owner may re-submit the alternative method after addressing the MPCA's basis for denial. The MPCA will respond within 30 days.

3. Construction of the project may commence upon the receipt of an alternative treatment method approval letter from the MPCA.

4. Owners that use an Alternative Method for the permanent stormwater management system must submit two years of monitoring data to demonstrate that the required treatment has been achieved. The Owner shall be notified by the MPCA within 30 days as to whether or not the monitoring data is acceptable and further action is required by

the Owner. If the Owner has not heard from the MPCA within 30 days, no further action is required by the Owner.

D. Applicability Criteria for an Individual Stormwater NPDES/SDS Permit

1. If the MPCA determines that stormwater discharges associated with a construction activity are contributing to a violation of a water quality standard or would be more appropriately regulated by an individual stormwater NPDES/SDS permit, the MPCA may require the Owner to be covered by an individual stormwater NPDES/SDS permit. The MPCA may require the Owner to develop and implement specific Best Management Practices (BMPs) and monitor the discharge from the site. If applicable, upon issuance of an individual stormwater NPDES/SDS permit, the conditions of the individual stormwater NPDES/SDS permit would replace those requirements in the Permit pertaining to stormwater, erosion, and sediment control.

2. If the terms and conditions of the Permit pertaining to stormwater, erosion, and sediment control cannot be met, an Owner may request an individual stormwater NPDES/SDS permit in accordance with Minn. R. 7001.

II. Stormwater Discharge Design Requirements

A. Stormwater Pollution Prevention Plan Requirements

1. The Owner must complete a SWPPP prior to conducting any construction activity. The SWPPP must contain:

   a. A combination of narrative plan sheets and, if appropriate, standard detail sheets that address the foreseeable conditions at any stage in the construction or post-construction activities;

   b. A description of the nature of the construction activity;

   c. A discussion of the potential for discharge of sediment and/or other potential pollutants from the site;

   d. Identification of the person(s) who:

      1) Is knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will oversee the implementation of the SWPPP and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs before and during construction, and

      2) Will have the responsibility for long-term operation and maintenance of the permanent stormwater management system (see Part II.C.);

   e. A chain of responsibility with all Operators on the site to ensure that the SWPPP will be implemented and stay in effect until the construction project is complete and the entire site has undergone final stabilization; and

f. A narrative describing the timing for installation of all erosion prevention and sediment control BMPs required in Parts II.B. and II.C. must also be included in the SWPPP.

2. The SWPPP requirements must be incorporated into the project's final plans and specifications and/or project documentation, as appropriate, and must include:

   a. Location and type of all temporary and permanent erosion prevention and sediment control BMPs along with procedures to be used to establish additional temporary BMPs as necessary for the site conditions during construction. Standard plates and/or specifications for the BMPs used on the project must be included in the final plans and specifications for the project;

   b. Estimated preliminary quantities tabulation anticipated at the start of the project for the life of the project must be included for all **erosion prevention** and **sediment control BMPs** in the **SWPPP;**

   c. The **SWPPP** must include the number of acres of impervious surface for both pre- and post-construction;

   d. A site map with existing and final grades including dividing lines and direction of flow for all pre-construction and post-construction stormwater runoff drainage areas located within the project limits. The site map must also include impervious surfaces and soil types;

   e. Locations of areas not to be disturbed;

   f. Location of areas where construction will be phased to minimize duration of exposed soil areas;

   g. All surface waters and existing wetlands which can be identified on maps such as United States Geological Survey 7.5 minute quadrangle maps or equivalent maps within one mile from the project boundaries, which will receive stormwater runoff from the construction site during or after construction. Where surface waters receiving runoff associated with construction activity will not fit on the plan sheet, the surface waters must be identified with an arrow indicating both direction and distance to the surface water; and

   h. Methods to be used for final stabilization of all exposed soil areas.

3. The Owner must amend the SWPPP as necessary to include additional requirements, such as additional or modified BMPs, designed to correct problems identified or address situations whenever:

   a. There is a change in design, construction, operation, maintenance, weather, or seasonal conditions that have a significant effect on the discharge of pollutants to surface waters or underground waters;

   b. Inspections or investigations by site operators, local, state, or federal officials that indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard exceedances; or

c. The SWPPP is not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity; or the SWPPP is not consistent with the requirements set forth in this document.

4. At any time after Permit coverage is effective, the MPCA may determine that the project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the SWPPP does not incorporate the requirements in Part II.A., item 8, related to an approved Total Maximum Daily Load (TMDL) implementation plan that contains construction stormwater-related requirements.

5. If the MPCA makes any of the determination(s) in items 3 or 4 above, the MPCA will notify the Owner in writing. In response, the Owner must develop a supplemental BMP action plan or appropriate SWPPP amendments describing SWPPP modifications to address the identified concerns and submit information requested by the MPCA.

6. **Inclusion of Mitigation Measures**

   a. The SWPPP must factor in any findings and include any stormwater mitigation measures required resulting from any environmental, archeological, or other required local, state, or federal review conducted for the project.

   b. For the purposes of this Appendix provision, **mitigation measures** means avoiding, minimizing, rectifying (e.g., repairing, rehabilitating, restoring), reducing, eliminating, or compensating for impacts related to:

      1) Stormwater discharges associated with the project's construction activity; and

      2) Erosion prevention, sediment control, and the permanent stormwater management system for the project.

7. The SWPPP must provide additional measures as necessary to assure compliance with surface and ground-water standards in Minn. R. 7050 and 7060 in karst areas and to ensure protection of drinking water supply management areas (see Minn. R. 4725.4450).

8. If runoff from the site discharges to a calcareous fen listed in Minn. R. 7050.0180, subp. 6b, and a letter of approval from the DNR has been obtained, this must be documented in the **SWPPP** for the project. Any additional stormwater mitigation measures contained in the DNR approval letter must be incorporated into the **SWPPP** for the project. If the DNR does not respond to the request for a letter of approval within 30 calendar days, this must be documented in the SWPPP for the project.

9. **Discharges to Impaired Waters and TMDLs**

   This part describes the requirements for projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water that is identified on the most recent EPA approved list of impaired waters. Impaired waters for the purposes of this permit are those waters identified as impaired pursuant to section 303(d) of the Clean Water Act where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic

impairment (fish bio-assessment, aquatic plant bio-assessment and aquatic macro invertebrate bio-assessment), and a TMDL is either required, or complete and EPA approved, for any of the identified pollutant(s) or stressor(s).

a. ***Requirements for Discharges to Impaired Waters***

For projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water, the **Permittee(s)** must identify the impaired water(s) in the **SWPPP**, and whether there is an EPA approved TMDL for the pollutant(s) or stressor(s) identified in this part. Unless otherwise notified by the MPCA in writing, the **Permittee(s)** identification of impaired waters must be based on the most recent EPA approved section 303(d) Clean Water Act list of impaired waters and EPA approved TMDLs at the time a complete permit application is submitted. The **Permittee(s)** identification must include those TMDLs applicable to the project's **stormwater** discharge that were approved at any time prior to permit application submittal and are still in effect.

b. ***Impaired Water Without an Approved TMDL or with an Approved TMDL and no Waste Load Allocation***

If runoff from the site discharges to an impaired water, and a TMDL has not been approved by EPA or there is an EPA approved TMDL that does not establish a Waste Load Allocation (WLA) for construction **stormwater**, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional **BMPs** in Part IV.B., items 2.a and b.

c. ***Impaired Water With an Approved TMDL and WLA***

If runoff from the site discharges to an impaired water for which there is an EPA approved TMDL that establishes a WLA for construction **stormwater**, and the TMDL does not identify any specific implementation activities that would apply to the site discharges, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional BMPs in Part IV.B, items 2a and b. If the TMDL identifies specific implementation activities regarding construction stormwater that would apply to the site discharges, the Permittee(s) must include the following in the **SWPPP**:

1) Identify the receiving water, the areas of the site discharging to it, and the pollutant(s) identified in the TMDL; and

2) **BMPs** identified in the TMDL and any other specific construction stormwater related implementation activities identified in the TMDL.

10. **Record Retention**. The SWPPP, all changes to it, and inspections and maintenance records must be kept by the Owner during construction in accordance with the reporting and recordkeeping requirements of the Permit.

The Owner must keep the SWPPP, along with the following additional records, on file for **six years** after completion of construction.

a. Any other permits required for the project;

b. Records of all inspection and maintenance conducted during construction according to Part III.E; and

c. All required calculations for design of the temporary and permanent stormwater management systems required in Parts II.B and II.C.

B. Temporary Sediment Basins

Where 10 or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to the runoff leaving the construction site or entering surface waters. The Owner is encouraged, but not required, to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than 10 acres drains to one area.

The basins must be designed and constructed according to the following requirements:

1. The basins must provide storage below the outlet pipe for a calculated volume of runoff from a 2-year, 24-hour storm from each acre drained to the basin, except that in no case shall the basin provide less than 1,800 cubic feet of storage below the outlet pipe from each acre drained to the basin.

2. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage below the outlet pipe per acre drained to the basin shall be provided where attainable until final stabilization of the site.

3. Temporary basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. The basin must be designed with the ability to allow complete basin drawdown (e.g., perforated riser pipe wrapped with filter fabric and covered with crushed gravel, pumps, or other means) according to Part III.D. for maintenance activities and provide a stabilized emergency overflow to prevent failure of pond integrity. Energy dissipation must be provided for the basin outlet according to Part III.B., item 4.

4. The temporary (or permanent) basins must be constructed and made operational concurrent with the start of soil disturbance that is upgradient of the area and contributes runoff to the pond.

5. Where the temporary sediment basin is not attainable due to site limitations, equivalent sediment controls such as smaller sediment basins, and/or sediment traps, silt fences, vegetative buffer strips, or any appropriate combination of measures are required for all down-slope boundaries of the construction area and for those side-slope boundaries deemed appropriate as dictated by individual site conditions. In determining whether installing a sediment basin is attainable, the Owner must consider public safety and may consider factors such as site soils, slope, and available area on site. **This determination must be documented in the SWPPP.**

C. Permanent Stormwater Management System

1. All stormwater must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on down-slope properties, or inundation in wetlands causing a significant adverse impact to the wetlands.

2. Where a project's ultimate development replaces vegetation and/or other pervious surfaces with one or more acres of cumulative impervious surface, a water quality volume of one-half inch of runoff from the new impervious surfaces created by the project must be treated by one of the methods outlined in items 4.a through e below prior to the runoff leaving the construction site or entering surface waters (excluding drainage systems that convey stormwater to a constructed permanent stormwater management facility designed to treat the water quality volume from the project).

3. For those areas of a project where there is no feasible way to meet the treatment requirement for the water quality volume, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to surface waters. A cumulative maximum of three 3 acres or one percent of project size, whichever is larger, can be treated in this manner.

4. Where the proximity to bedrock precludes the installation of any of the permanent stormwater management practices outlined in Part II.C, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to surface waters.

   a. ***Wet Sedimentation Basin***

      1) The basin must have a permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least three feet and must have no depth greater than 10 feet. The basin must be configured such that scour or resuspension of solids is minimized.

      2) The basin's water quality volume is calculated as one-half inch of runoff from the new impervious surfaces created by the project.

      3) Basin outlets shall be designed such that the water quality volume is discharged at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the pond.

      4) Basin outlets must be designed to prevent short-circuiting and the discharge of floating debris.

      5) Basin outlets must have energy dissipation.

      6) The basin must provide a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design.

      7) Adequate maintenance access must be provided, typically 8 feet wide, for future maintenance of the basin.

   b. ***Infiltration/Filtration***

      Infiltration/Filtration options include, but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, sand filters, organic filters, bio-retention areas, enhanced swales, dry storage ponds with under-drain discharge, off-line retention areas, and natural depressions. Infiltration must be used only as appropriate to the site and land uses. Settle able solids, floating materials, oils, and

grease should be removed from the runoff to the maximum extent practicable before runoff enters the infiltration/filtration system. Filtration systems must have a reasonable chance of achieving approximately 80 percent removal of total suspended solids. The Owner must evaluate the impact of constructing an infiltration practice on existing hydrologic features (e.g., existing **wetlands**) and try to maintain pre-existing conditions (e.g., do not breach a perched water table which is supporting a **wetland**). (For a discussion of ground-water warnings, design measures, maintenance considerations, or other retention, detention, and treatment devices, see the **Minnesota Stormwater Manual** or MPCA's "**Protecting Water Quality in Urban Areas**" found on the MPCA's web-site at http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html.)

The following criteria shall be used for this system:

1) Infiltration systems should not be excavated to final grade until the contributing drainage area has been constructed and fully stabilized;

2) During construction of an infiltration system, rigorous sediment and erosion controls (e.g., diversion berms) should be used to keep sediment and runoff completely away from the infiltration area. The area must be staked off and marked so that heavy construction equipment will not compact the soil in the proposed infiltration area;

3) To prevent clogging of the infiltration or filtration system, a pretreatment device such as a vegetated filter strip, small sedimentation basin, or water quality inlet (e.g., grit chamber) must be used to settle particulates before the stormwater discharges into the infiltration or filtration system;

4) Infiltration or filtration systems shall be sufficient to infiltrate or filter a water quality volume of one-half inch of runoff from the new impervious surfaces created by the project;

5) The water quality volume shall discharge through the soil or filter media in 48 hours or less. Additional flows that cannot be infiltrated or filtered in 48 hours should be routed to bypass the system through a stabilized discharge point. A way to visually verify that the system is operating as designed must be provided;

6) Appropriate on-site testing consistent with the recommendations found in the **Minnesota Stormwater Manual** shall be conducted to ensure a minimum of three feet of separation from the seasonally saturated soils (or from bedrock) and the bottom of the proposed infiltration system. Calculations and computer model results that demonstrate the design adequacy of the infiltration system must be included as part of the SWPPP;

7) Adequate maintenance access must be provided, typically eight feet wide, along with a maintenance plan identifying whom will be performing future maintenance of the infiltration or filtration system; and

8) Use of designed infiltration systems from industrial areas with exposed significant materials or from vehicle fueling and maintenance areas is prohibited.

c. ***Regional Ponds***

1) Regional ponds can be used provided that they are constructed ponds, not a natural wetland or waterbody, and designed in accordance with the requirements in Part II.C, item 1, for all water from impervious surfaces that reach the pond.

2) Owners shall not construct regional ponds in wetlands regardless of their condition.

3) There must be no significant degradation of the waterways between the project and the regional pond.

4) The Owner must obtain written authorization from the applicable local governmental unit (LGU) or private entity that owns and maintains the regional pond. The LGU's or private entity's written authorization must identify that the regional pond will discharge the water quality volume one-half inch of runoff from the impervious watershed area at no more than 5.66 cubic feet per second per acre of surface area of the pond. The Owner must include the LGU's or private entity's written authorization in the SWPPP. The LGU's or private entity's written authorization must be obtained before the Owner finalizes the SWPPP and before any application for this Permit is made to the MPCA.

d. ***Combination of Practices***

A combination of practices, including those required by a LGU, which meet the requirements of subitems a, b, and c above, may be used such that the water quality volume of one-half inch of runoff from the new impervious surfaces created by the project is accounted for in the Owner's permanent stormwater management system (e.g., one-quarter inch infiltrated and one-quarter inch treated through a wet sedimentation basin). If any combination of these practices is used, the SWPPP must contain documentation (e.g., LGU or private entity's authorization, infiltration computer model results, or calculations, etc.) identifying the volume that each practice addresses.

e. ***Alternative Method***

Where an alternative, innovative treatment system is proposed and demonstrated by calculation, design, or other independent methods to achieve approximately 80 percent removal of total suspended solids on an annual, average basis, the MPCA will approve the method if the process outlined in Part I.C is completed, and the following information is submitted:

1) All calculations, drainage areas, plans, and specifications for the proposed alternative method and a graphic representation of the area to be served by the method. These items must be included in the SWPPP and submitted to the MPCA at least 90 days prior to the proposed starting date of the construction activity.

2) A two year monitoring plan to sample runoff from the proposed method. The plan must include a discussion of the methods used to collect samples, location

where samples will be taken (upstream and downstream of the proposed method), frequency of samples (minimum of six runoff events sampled), identify laboratory used to analyze the samples, and quality assurance and quality control methods to be used. The plan must include a schedule for submitting the monitoring data annually.

3) A mitigation plan that addresses how the water quality volume will be treated in the event that the monitoring data shows the proposed alternative treatment method does not function as designed.

4) The alternative method must achieve approximately 80 percent removal of total suspended solids on an average annual basis for the conditions expected at the site. The design must also consider public safety, health, and water quality concerns. Proprietary information on effectiveness will not be considered for alternative treatment method review and approval.

III. Construction Activity Requirements

A. Stormwater Pollution Prevention Plan

The Owner must implement the SWPPP and the requirements of this Part. The **BMPs** identified in the **SWPPP** and this Appendix must be installed in an appropriate and functional manner.

B. Erosion Prevention Practices

1. The **Permittee** must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion so that the inspection and maintenance requirements of Part III.E are met. The location of areas not to be disturbed must be delineated (e.g., with flags, stakes, signs, silt fence, etc.) on the development site before work begins.

2. All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement but must comply with Part III.C.5.

3. The **normal wetted perimeter** of any temporary or permanent drainage ditch that drains water from a construction site or diverts water around a site must be **stabilized** within 200 lineal feet from the property edge or from the point of discharge to any **surface water**. Stabilization of the last 200 lineal feet must be completed within 24 hours of connecting to the **surface water**.

4. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to surface water.

C. Sediment Control Practices

1. Sediment control practices must minimize sediment from entering surface waters, including curb and gutter systems and storm sewer inlets.

    a. Temporary or permanent drainage ditches and sediment basins that are designed as part of a treatment system (e.g., ditches with rock check dams) require sediment control practices only as appropriate for site conditions.

    b. If the downgradient treatment system is overloaded, additional upgradient sediment control practices must be installed to eliminate the overloading and the SWPPP must be amended to identify these additional practices as required in Part II.A, items 3.a through d.

    c. In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

2. Sediment control practices must be established on all downgradient perimeters before any upgradient land-disturbing activities begin. These practices shall remain in place until final stabilization has been established in accordance with Part III.G.

3. The timing of the installation of sediment control practices may be adjusted to accommodate short-term activities such as clearing or grubbing or passage of vehicles. Any short-term activity must be completed as quickly as possible and the sediment control practices must be installed immediately after the activity is completed. However, sediment control practices must be installed before the next precipitation event even if the activity is not complete.

4. All storm drain inlets (including tile intakes within 300 feet of the disturbed area) must be protected by appropriate **BMPs** during construction until all sources with potential for discharging to the inlet have been **stabilized**. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified and the **Permittee(s)** have received written correspondence from the jurisdictional authority (e.g. city/county/township/MnDOT engineer) verifying the need for removal. The written correspondence must be documented in the **SWPPP** or available with 72 hours upon request. When written correspondence cannot be obtained in a timely manner, the specific inlet protection can be removed to alleviate the immediate safety concern. However, efforts to obtain written correspondence must be documented in the SWPPP and available with 72 hours upon request. Permission to remove inlet protection based on a specific safety concern must still be obtained from the jurisdictional authority with 30 days of removal.

5. Temporary soil stockpiles must have silt fence or other effective sediment controls and cannot be placed in surface waters including stormwater conveyances such as curb and gutter systems or conduits and ditches.

6. Vehicle tracking of sediment from the construction site must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping

must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street according to Part III.E, item 4.d.

7. The Owner must install temporary sedimentation basins as required in Part II.B.

D. Dewatering and Basin Draining

1. Dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the construction activity that may have turbid or sediment-laden discharge water must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible. If the water cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the appropriate BMPs such that the discharge does not adversely affect the receiving water or down-stream landowners. The Owner must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids.

2. All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on down-slope properties, or inundation in wetlands causing significant adverse impact to the wetland.

E. Inspections and Maintenance

1. The **Permittee(s)** (either the **owner** or **operator**, whoever is identified in the **SWPPP**) must routinely inspect the construction site **once every seven days** during active construction and within 24 hours after a rainfall event greater than one-half inch in 24 hours. Following an inspection which occurs within 24 hours after a rainfall event, the next inspection must be conducted within seven days after that.

2. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the SWPPP in accordance with Part II.A, item 7. Records of each inspection and maintenance activity shall include:

   a. Date and time of inspections;

   b. Name of person(s) conducting inspections;

   c. Findings of inspections (including recommendations for corrective actions);

   d. Corrective actions taken (including dates, times, and party(ies) completing maintenance activities);

   e. Date and amount of all rainfall events greater than one-half inch in 24 hours; and

   f. Documentation of changes made to the SWPPP as required in Part II.A, item 3.

3. ***Changes in Inspection Schedule***

a. Where parts of the construction site have **permanent cover**, but work remains on other parts of the site, inspections of the areas with **permanent cover** may be reduced to once per month. Where construction sites have **permanent cover** on all exposed soil areas and no construction activity is occurring anywhere on the site, the site must be inspected for a period of 12 months (the inspections may be ceased during frozen ground conditions). Following the twelfth month of **permanent cover** and no **construction activity**, inspections may be terminated until construction activity is once again initiated or sooner if notified in writing by the MPCA. Where work has been suspended due to frozen ground conditions, the required inspections and maintenance schedule must begin within 24 hours after runoff occurs at the site or prior to resuming construction, whichever comes first.

4. All **erosion prevention** and **sediment control BMPs** must be inspected to ensure integrity and effectiveness. All nonfunctional **BMPs** must be repaired, replaced, or supplemented with functional **BMPs** within 24 hours after discovery, or as soon as field conditions allow access unless another time frame is specified below. The **Permittee(s)** must investigate and comply with the following inspection and maintenance requirements:

   a. All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches one-third of the height of the fence. These repairs must be made within 24 hours of discovery or as soon as field conditions allow access.

   b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access according to Part III.D.

   c. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of sediment being deposited by erosion. The Owner must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven days of discovery unless precluded by legal, regulatory, or physical access constraints. The Owner shall use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven calendar days of obtaining access. The Owner is responsible for contacting all local, regional, state, and federal authorities and receiving any applicable permits prior to conducting any work.

   d. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all off-site paved surfaces within 24 hours of discovery or, if applicable, within a shorter time to comply with Part II.C, item 6.

   e. The Owner is responsible for the operation and maintenance of temporary and permanent water quality management BMPs as well as all erosion prevention and sediment control BMPs for the duration of the construction work at the site. The Owner is responsible until the site has undergone final stabilization.

f. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.

5. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activities is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.

F. Pollution Prevention Management Measures. The external washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff and waste must be properly managed. No engine degreasing is allowed on site.

Concrete washout onsite: Concrete washout operations must take place in an area that is at least 300 feet from a surface water, road ditch, tile intake, sinkhole, or well unless containment of the solid and liquid wastes is provided.

G. Final Stabilization. The Owner must ensure final stabilization of the site. Final stabilization has been achieved when all:

1. **Final Stabilization** requires that all soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface areas, or other equivalent means necessary to prevent soil failure under erosive conditions.

2. The **Permittee(s)** must ensure that the permanent **stormwater** treatment system meets all requirements in Part III.C, above, This includes but is not limited to, a final clean out of temporary or permanent sedimentation basins that are to be used as permanent water quality management basins and final construction or maintenance of infiltration basins. All sediment must be removed from conveyance systems and ditches must be **stabilized** with **permanent cover.**

3. Prior to submission of the Notice of Termination **(NOT)**, all temporary synthetic and structural **erosion prevention** and **sediment control BMPs** (such as silt fences) must be removed on the portions of the site for which the Permittee is responsible. **BMPs** designed to decompose on site (such as some compost logs) may be let in place.

4. For construction projects on land used for agricultural purposes, **Final Stabilization** may be accomplished by returning the disturbed land to its preconstruction agricultural use.

IV. Wetlands and Special Waters

All requirements in this Part are in addition to BMPs already specified in this Appendix. Where provisions of this Part conflict with requirements elsewhere in this Appendix, the provisions in this Part take precedence. All BMPs used to comply with this Part must be documented in the SWPPP for the project. If the terms and conditions of this Part cannot be met, an individual stormwater NPDES/SDS permit will be required in accordance with Minn. R. ch. 7001.

A. Requirements for Discharging to Wetlands. If the project has any stormwater discharges with the potential for significant adverse impacts to a wetland (e.g., conversion of a natural wetland to a stormwater pond), the Owner must demonstrate that the wetland mitigative sequence has been followed in accordance with items 1 or 2 below.

1. If the potential adverse impacts to a wetland on a specific project site have been addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 Program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, the Owner may use the permit or other determination issued by these agencies to show that the potential adverse impacts have been addressed. For the purposes of this Permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts.

2. If there are impacts from the project that are not addressed in one of the permits or other determinations discussed in item 1 (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), the Owner must minimize all adverse impacts to wetlands by utilizing appropriate measures. Measures used must be based on the nature of the wetland, its vegetative community types, and the established hydrology. These measures include, in order of preference:

   a. Avoid all significant adverse impacts to wetlands from the project and post-project discharge.

   b. Minimize any unavoidable impacts from the project and post-project discharge.

   c. Provide compensatory mitigation when the Owner determines that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation shall be of the same type, size, and whenever reasonable and practicable in the same watershed as the impacted wetland.

B. Requirements for Discharges to Special Waters

1. Additional BMPs, together with enhanced runoff controls, are required for discharges to the special waters. The BMPs identified for each special water are required for those areas of the project draining to a discharge point on the project that is within 2,000 feet of a special water and flows to that special water. These special waters are:

   a. ***Wilderness Areas***: Boundary Waters Canoe Area Wilderness, Voyageurs National Park, Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River, and the Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. Discharges to these waters must incorporate the BMPs outlined in item 2.a through 2.d below.

   b. ***Mississippi River:*** Those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board Comprehensive Plan, dated February 12, 1981. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.c below.

   c. ***Scenic or Recreational River Segments***: Saint Croix River, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright County line; Kettle River from north Pine County line to the site of the former dam

at Sandstone; Minnesota River from Lac qui Parle Dam to Redwood County State Aid Highway 11; Mississippi River from County State Aid Highway 7 Bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from State Aid Highway 27 Bridge in Onamia to Madison and Rice Streets in Anoka. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.c below.

d. ***Lake Superior***: (prohibited and restricted) Discharges to Lake Superior must incorporate the BMPs outlined in items 2.a through 2.c below.

e. ***Lake Trout Lakes***: Identified in Minn. R. 7050.0470, including those inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.d below.

f. ***Trout Lakes***: Identified in Minn. R. 6264.0050, subp. 2. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.d below.

g. ***Scientific and Natural Areas***: Boot Lake, Anoka County; Kettle River in Sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; Waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.d below.

h. ***Trout Streams***: Identified in Minn. R. 6264.0050, subp. 4. Discharges to these waters must incorporate the BMPs outlined in items 2.a through 2.c and 2.e below.

i. ***Impaired Waters***: Waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen or aquatic biota (fish bio-assessment, aquatic plant bio-assessment, and aquatic macro invertebrate bio-assessment). Discharges to these waters must incorporate the **BMPs** outlined in sub-items 2.a and b, below.

Note on impaired waters listing terminology: The terms in parenthesis in item 1.i, above, are the most current terminology used to list waters as impaired at the time of permit issuance. These terms are subject to change. For example, at one time waters were listed as impaired for phosphorus and now those same waters are listed as impaired for nutrient eutrophication biological indicators. If the terminology changes for one of the pollutant(s) or stressor(s) identified in the permit, the MPCA will keep a list of the new terms on its construction **stormwater** web site.

2. ***Additional BMPs for Special Waters***

a. ***During construction:***

1) All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than seven days after the **construction activity** in that portion of the site has temporarily or permanently ceased.

2) Temporary sediment basin requirements described in Part II.B. must be used for common drainage locations that serve an area with five or more acres disturbed at one time.

b. ***Post-construction***. The **water quality volume** that must be treated by the project's permanent **stormwater** management system described in Part II.C.2 shall be one inch of runoff from the new **impervious surfaces** created by the project. Where site conditions allow, at least ½ inch of the **water quality volume** must be infiltrated. See Part II.C.4.b for more information on infiltration design and appropriate site conditions. If it is determined that site conditions are not appropriate for infiltrations (e.g. lack of 3 ft. of separation to seasonally saturated groundwater, proximity to bedrock, contaminated soils) the reasons should be documented in the **SWPPP** for the project. Infiltration is not required in Hydrologic Soil Group D soils.

c. ***Buffer Zone***. An undisturbed buffer zone of not less than 100 linear feet from the special water (not including tributaries) shall be maintained at all times. Exceptions from this requirement for areas such as water crossings or limited water access are allowed if the Owner fully documents in the SWPPP the circumstances and reasons that the buffer encroachment is necessary. Replacement of existing impervious surface within the buffers is allowed under this permit. All potential water quality, scenic and other environmental impacts of these exceptions must be minimized by the use of additional or redundant **BMPs** and documented in the **SWPPP** for the project.

d. ***Enhanced Runoff Controls***. The permanent stormwater management system must be designed such that the post-project runoff rate and volume does not exceed the pre-project runoff rate and volume from the 1-year, 24-hour and 2-year, 24-hour precipitation events remains the same.

e. ***Temperature Controls***. The permanent stormwater management system must be designed such that the discharge from the project will minimize any increase in the temperature of trout stream receiving waters resulting from the 1-year, 24-hour and 2-year, 24-hour precipitation events. This includes all tributaries of designated trout streams within the section that the trout stream is located. Projects that discharge to trout streams must minimize the impact using one or more of the following measures, in order of preference:

1) Minimize new impervious surfaces.

2) Minimize the discharge from connected impervious surfaces by discharging to vegetated areas or grass swales and through the use of other non-structural controls.

3) Infiltration or evapotranspiration of runoff in excess of pre-project conditions (up to the 2-year, 24-hour precipitation event).

4) If ponding is used, the design must include an appropriate combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges, or constructed wetland treatment cells that will limit temperature increases. The pond should be designed to draw down in 24 hours or less.

5) Other methods that will minimize any increase in the temperature of the trout stream.

f. For the BMPs described in items 2.b, 2.d, and 2.e above:

Where the proximity to bedrock precludes the installation of any of the permanent stormwater management practices, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to surface waters.

V. Definitions

The following definitions shall apply specifically to this document. All other definitions contained in the Permit and not otherwise mentioned below shall retain the meaning in the Permit.

A. "Best Management Practices" ("BMPs") means erosion and sediment control and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing degradation of surface water including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by state or designated area-wide planning agencies.

Individual **BMPs** found in this Permit are described in the current version of ***Protecting Water Quality in Urban Areas***, Minnesota Pollution Control Agency 2000. BMPs must be adapted to the site and can be adopted from other sources. However, they must be similar in purpose and at least as effective and stringent as the MPCA's BMPs. (Other sources include manufacturers specifications, ***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, U.S. Environmental Protection Agency 1992, and ***Erosion Control Design Manual***, Minnesota Department of Transportation, et al., 1993).

B. "Construction Activity" means construction activity includes construction activity as defined in 40 CFR § 122.26(b)(14)(x) and small construction activity as defined in 40 CFR § 122.26(b)(15). This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling, and excavating. Construction activity includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more.

C. "Dewatering" means the removal of water for construction activity. It can be a discharge of appropriated surface or ground water to dry and/or solidify a construction site. It may require Minnesota Department of Natural Resources permits to be appropriated and if contaminated may require other MPCA permits to be discharged.

D. "Discharge" means the conveyance channeling, runoff, or drainage of stormwater, including snow melt, from a construction site.

E. **"Energy Dissipation"** means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to, aprons, rip rap, splash pads, and gabions which are designed to prevent erosion.

F. **"Erosion"** means the wearing away of soil by rainfall, surface water runoff, wind, or ice movement.

G. **"Erosion Prevention"** means measures employed to prevent erosion including but not limited to: soil stabilization practices, limited grading, mulch, temporary erosion protection or **permanent cover**, and construction phasing.

H. **"Exposed Soil Areas"** means all areas of the construction site where the perennial vegetation (including trees, shrubs, and brush) has been removed. This includes topsoil stockpile areas, borrow areas, and disposal areas within the construction site.

I. **"Final Plans and Specifications"** means the reports, prints, drawings, written descriptions, and clear technical requirements necessary to build a project used by the Owner for the purposes of entering into a construction contract.

J. **"Final Stabilization"** means that either:

1. All soil-disturbing activities at the site have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed; or

2. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land) final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface waters and drainage systems, and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria in item 1 above.

K. **"General Contractor"** means the party who signs the construction contract with the Owner to construct the entire project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor will be the party responsible for managing the entire project on behalf of the Owner. In some cases, the Owner may be the general contractor. In these cases, the Owner will sign the permit application as the general contractor and would become the sole permittee.

L. **"Impervious Surface"** means a constructed, hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, concrete, asphalt, or gravel roads.

M. **"Local Permitting Authority"** means the township, county, municipality, conservation district, watershed district, watershed management organization, or other public entity which has the authority to review and approve construction activities.

N. **"Local Unit of Government's Existing Stormwater Management Plan or Practice"** means plans or practices developed by the local permitting authority under state law for the purposes of protecting water quality.

O. **"National Pollutant Discharge Elimination System"** or **"NPDES"** means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (Sections 301, 318, 402, and 405) and United States Code Title 33, Sections 1317, 1328, 1342, and 1345.

P. **"Normal Wetted Perimeter"** means the area of a conveyance such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

Q. **"Notice of Termination"** means notice to terminate coverage under this Permit after construction is complete, the site has undergone stabilization, and all conditions of this Permit have been satisfied. Notice of termination forms are available from the Agency.

R. **"One or More Acres of Total Land Area"** means any project that disturbs at least one acre of land measured by the project's construction corridor, excluding areas staked as not to be disturbed. If the project is less than one acre but is part of a larger common plan of development or sale (where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan), it is defined as "one acre or more of total land area".

S. **"Owner"** or **"Owners"** means the persons having possession, control, or title to an animal feedlot or Manure storage area as defined by Minn. R. 7020.0300, subp. 17, and for purposes of this document, refers to the Permittee identified by the Permit.

T. **"Paved Surface"** means a constructed, hard, smooth surface made of asphalt, concrete, or other pavement material. Examples include, but are not limited to, roads, sidewalks, driveways, and parking lots.

U. **"Permanent Cover"** means final stabilization. Examples include grass, gravel, and concrete.

V. **"Permittee"** means a person, firm, governmental agency, or other institution that signs the application submitted to the MPCA and is responsible for compliance with the terms and conditions of the Permit.

W. **"Runoff Coefficient"** means the fraction of total precipitation that is not infiltrated into or otherwise retained by the soil, concrete, asphalt, or other surface upon which it falls that will appear at the conveyance as runoff.

X. **"Sediment"** means the product of an erosion process, solid material both mineral and organic, that is in suspension, is being transported, or has been moved by water, air, or ice, and has come to rest on the earth's surface either above or below water level.

Y. **"Sediment Control"** means methods employed to prevent sediment from leaving the site. Sediment control practices include silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

Z. **"Small Construction Activity"** means small construction activity as defined in 40 CFR § 122.26(b)(15) . Small construction activities include clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

AA. **"Soil"** means the unconsolidated mineral and organic mineral material on the immediate surface of the earth.

BB. "**Stabilized"** means the exposed ground surface has been covered by staked sod, rip rap, wood fiber blanket, or other material which prevents erosion from occurring. Grass seed is not stabilization.

CC. **"Standard Plates"** means general drawings having or showing similar characteristics or qualities that are representative of a construction practice or activity.

DD. **"Stormwater"** means the precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage (defined in 40 CFR § 122.26 [b][13]). Stormwater does not include construction site dewatering.

EE. **"Stormwater Pollution Prevention Plan"** or **"SWPPP"** means a plan for stormwater discharge that includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

FF. **"Surface Water or Waters"** means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private.

GG. **"Temporary Erosion Protection"** means methods employed to prevent erosion. Examples of temporary cover include: straw, wood fiber blanket, wood chips, and erosion netting.

HH. "**Underground Waters"** means water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. The term ground water shall be synonymous with underground water.

II. **"Waters of the State"** (as defined in Minn. Stat. § 115.01, subd. 22) means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

JJ. **"Water Quality Volume"** means one-half nch of runoff from the new impervious surfaces created by this project and is the volume of water to be treated in the permanent stormwater management system.

KK. "Wetland" or **"Wetlands"** is defined in Minn. R. 7050.0130, subp. F, and includes those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes:

1. A predominance of hydric soils;

2. Inundated or saturated by surface water or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and

3. Under normal circumstances support a prevalence of such vegetation.