



**BUREAU OF WATER QUALITY
BUREAU OF WATERSHED MANAGEMENT**

GUIDANCE DOCUMENT

**TMDL WDNR Landspreading Work
Group**

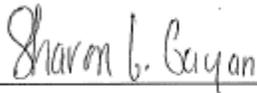
**Mixing of Industrial Wastes (Industrial Liquid Wastes and
Industrial Sludges) into Manure Storage Units:
How to Review and Approve**

July 31, 2018

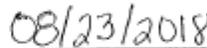
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This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:



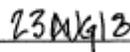
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1.0 Definitions

1. **By-product solids**: means waste materials from animal product or food processing industry including, but not limited to remains of butchered animals, paunch manure, and vegetable waste materials such as leaves, cuttings, peelings, and actively fermenting sweet corn silage (referenced from s. NR 214.03(4) Wis. Adm. Code).

2. **Concentrated animal feeding operation (CAFO)**: a farm that holds a WPDES permit and meets the definition under s. NR 243.03(12), Wis. Adm. Code.

3. **Department**: means Wisconsin Department of Natural Resources (referenced from s. NR 214.03(8), Wis. Adm. Code).

4. **Detrimental effect**: means contamination of the lands or waters of the state, or making the same injurious to public health, harmful for commercial or agricultural use, or deleterious to animal or plant health (referenced from s. NR 214.03(10) Wis. Adm. Code).

5. **Grease interceptor** (aka grease trap): a water tight receptacle designed to intercept and retain grease or fatty substances contained in kitchen and other food wastes (referenced from s. NR 113.03(21), Wis. Adm. Code). This term should not to be confused with a receptacle for grease collected from fryers (and similar cooking processes), and retained in onsite containers for removal/reuse.

A) **Industrial/process grease interceptor** (aka food processing grease): a water tight receptacle designed to intercept and retain grease connected through process piping (not sanitary plumbing). Process grease is considered an industrial sludge (see definition of industrial sludge below) because of the physical (solids) separation process of the grease interceptor. Industrial sludges (accumulated solids) are regulated pursuant to s. NR 214.18, Wis. Adm. Code.

B) **Sanitary grease interceptor**: a water tight receptacle designed to intercept and retain grease connected through sanitary plumbing in and/or from kitchens and restaurants. Sanitary grease contains human pathogens. Sanitary grease is considered septage. Septage wastes are regulated pursuant to ch. NR 113, Wis. Adm. Code.

6. **Industrial liquid waste or industrial wastewater**: means process wastewater (non-agriculture process wastewater) and waste liquids, including silage leachate, whey, whey permeate, whey filtrate, contact cooling water, cooling or boiler water containing water additives, and wash water generated in industrial, commercial, and agricultural operations (referenced from s. NR 214.03(27), Wis. Adm. Code).

Note: Non-domestic wastewater may be considered liquid industrial wastes (regulated per ch. 214 Wis. Adm. Code) provided wastes are land applied for beneficial reuse (nutrients, organic matter, etc.) and are non-hazardous (per s. NR 660.10(52), Wis. Adm. Code).

Note: Chapter NR 243.03(53) defines “process wastewater” as “wastewater from the production area directly or indirectly used in the operation of animal feeding operation that result from...water that comes into contact with any raw materials or animal by-products including manure, feed, milk, eggs, or bedding.” Permitted farm (CAFO) process wastewater is not considered a ch. NR 214 Wis. Adm. Code regulated waste.

7. Land Application Geodatabase (LAG): an ArcGIS geodatabase used to review and catalog liquid industrial wastes, industrial sludge, by-product solids, domestic sewage sludge, and septage landspreading fields (regulated under chs. NR 214, 204, and 113 Wis. Adm. Codes, respectively).

8. Landspreading system (landspreading): means a system where a controlled quantity of liquid waste or by-product solid is uniformly applied onto, or incorporated into, the soil surface of designated sites by means of a vehicle with a spreader bar, spray gun, or sub-surface injector. The wastes are to be applied for the benefit of the vegetative cover. Landspreading systems also include those systems where liquid wastes are occasionally applied through temporary irrigation piping at a frequency similar to that of application by vehicle (referenced from s. NR 214.03(26), Wis. Adm. Code).

9. Land treatment system: means a system that utilizes the physical, chemical, and biological abilities of the soil to decompose pollutants in the wastes. Land treatment systems include:

- A. Absorption or seepage pond systems,
- B. Ridge and furrow systems,
- C. Spray irrigation systems,
- D. Overland flow systems,
- E. Subsurface absorption field systems,
- F. Landspreading systems for liquid wastes or organic by-products,
- G. Sludge spreading systems, and
- H. Any other land area receiving liquid wastes, by-products, or sludge discharges (referenced from s. NR 214.03(24) Wis. Adm. Code).

Note: For the purposes of these procedural instructions, a sludge spreading system is equivalent to a landspreading system for sludge.

10. Manure (animal waste): means a material that consists primarily of litter or excreta, treated or untreated, from livestock, poultry or other animals. Manure includes material mixed with runoff, bedding contaminated with litter or excreta, or process wastewater (referenced from s. NR 243.03(36), Wis. Adm. Code).

Note: For the purposes of these procedural instructions, manure digesters are considered a manure transfer structure that transfers waste into manure storage units. Therefore, the mixing of industrial wastes (industrial liquid wastes and industrial sludges) into a manure digester should be evaluated per this document.

11. Manure storage unit: any above or below ground unit designed (NRCS 313 standards) and approved to store manure. An approval may be the county land and water conservation department or pursuant to ch. NR 243 Wis. Adm. Code requirements.

Note: For the purposes of these procedural instructions, manure digesters are considered a manure transfer structure that transfers waste into manure storage units. Therefore, the mixing of industrial wastes (industrial liquid wastes and industrial sludges) into a manure digester should be evaluated per this document.

12. Non-Permitted Farm: farm that does not have a WPDES permit (general or individual) that authorizes the application of liquid industrial waste or manure to cropland.

13. Permitted Farm: livestock operation that has a WPDES permit (example: Concentrated Animal Feeding Operation or CAFO) that authorizes the application of liquid and/or solid manure to croplands or authorizes a discharge to surface waters.

14. Process wastewater (agricultural): means wastewater from the production area directly or indirectly used in the operation of animal feeding operation that result from any of the following:

- A. Spillage or overflow from animal or poultry watering systems;
- B. Washing, cleaning, or flushing pens, barns, manure pits, or other animal feeding operation facilities;
- C. Direct contact swimming, washing, or spray cooling of animal or dust control;
- D. Water that comes into contact with any raw materials or animal byproducts including manure, feed, milk, eggs, or bedding (referenced from s. NR 243.03(53), Wis. Adm. Code).

Note: Process wastewater includes milkhouse (or milking center) waste as well as silage leachate if it is mixed into the manure storage unit pursuant to ch. NR 243 Wis. Adm. Code.

15. Septage: means wastewater or contents of septic or holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, seepage trenches, privies, or portable restrooms (referenced from s. NR 113.03(55), Wis. Adm. Code).

16. Sewer sludge or “sludge” or biosolids: means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes scum or solids removed in primary, secondary or advanced wastewater treatment processes and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works (referenced from s. NR 204.03(55) Wis. Adm. Code).

17. Sludge (industrial sludge): means accumulated solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of water or wastewater (referenced from s. NR 214.03(34), Wis. Adm. Code).

18. SWAMP: a department database used to record wastewater documents and data.

19. Total Volume: means the total gallons of manure held in the storage unit just prior to land application. Two examples are provided below:

Example 1: WPDES permitted farm with 1,000,000 gallon manure storage unit. The farm generates 900,000 gallons of manure annually. The manure storage unit is emptied once/year. Total volume of mixture at time of landspreading: 1,000,000 gallons. Under the s. NR 214.17(1), Wis. Adm. Code “10%” exemption, the total maximum volume of industrial liquid waste at time of landspreading is 100,000 gallons.

Example 2: WPDES permitted farm with 1,000,000 gallon manure storage unit. The manure storage unit is emptied twice per year (spring and fall). In the spring, the manure storage unit contains 1,000,000 total gallons. Under the s. NR 214.17(1), Wis. Adm. Code “10%” exemption, the total maximum volume of industrial liquid waste at time of landspreading is 100,000 gallons.

Only 400,000 gallons (40%) of the manure storage unit is emptied in the spring. Volume remaining in the storage unit is 600,000 gallons. Industrial liquid waste still present in the manure storage unit: 60,000 gallons (10%).

In the fall, assume the farmer wants to add the maximum industrial liquid waste contribution to remaining capacity of manure storage unit. A capacity of 400,000 gallons remains in the manure storage unit. The farmer must add 360,000 gallons of manure to meet the s. NR 214.17(1), Wis. Adm. Code “10%” exemption).

Caution: Total manure storage unit capacity may not be exceeded by filling freeboard space of manure storage unit. The farmer adds 360,000 gallons of manure. The farmer allows a contract hauler to add 40,000 gallons of industrial liquid waste into manure storage unit. Total maximum volume (of industrial liquid waste) at the time of landspreading: 100,000 gallons.

Total industrial liquid waste mixed into manure storage unit in calendar year is 140,000 gallons. Total manure mixed into manure storage unit in calendar year is 1,260,000 gallons. Total mixed volume (manure + industrial liquid waste) landspread: 1,400,000 gallons.

20. Wastewater-Non-Domestic: includes, but is not limited to wastes collected from non-residential garages used for storage, maintenance, or washing of motor vehicles, commercial food processing, commercial laundromats, animal shelters, or kennels, animal rendering, metal fabricating, electronic component manufacturing, chemical manufacturing, milkhouses and other industrial and commercial process water. [clarified pursuant to DSPPS (DComm) and DNR Memo of Understanding dated December 16, 1999].

Note: These procedural instructions exclude any tanks containing a mix of nondomestic and domestic wastes.

2.0 Acronyms

1. BOD₅: Biochemical Oxygen Demand (5 days; commonly “BOD”)
2. CAFO: Concentrated Animal Feeding Operation
3. COD: Chemical Oxygen Demand

4. DATCP: Wisconsin Department of Agriculture, Trade and Consumer Protection
5. DNR: Wisconsin Department of Natural Resources (aka: “department”)
6. DSPS: Wisconsin Department of Safety and Professional Services (formerly Department of Commerce or “DComm”)
7. ILW: Industrial Liquid Wastes
8. LAG: Land Application Geodatabase
9. NMP: Nutrient Management Plan
10. NRCS: Natural Resource Conservation Service (formerly known as the United States Soil Conservation Service (SCS))
11. POTW: Publicly Owned Wastewater Treatment Work
12. POWTS: Private Onsite Wastewater Treatment System
13. PSC: Public Service Commission
14. SWAMP: System for Wastewater Applications, Monitoring, and Permits
15. TKN: Total Kjeldahl Nitrogen
16. WPDES: Wisconsin Pollutant Discharge Elimination System

3.0. Applicability

These procedural instructions address the mixing of industrial liquid wastes (regulated under s. NR 214.17, Wis. Adm. Code) and industrial sludges (regulated under s. NR 214.18, Wis. Adm. Code) into manure storage units. Liquid and cake industrial sludges are considered the same when mixed into manure storage units.

For the purposes of this document and pursuant to ch. NR 243, Wis. Adm. Code manure digesters are considered “reviewable” structures. While manure digesters are not considered manure storage units, manure digesters are considered a manure transfer structure that transfers waste into manure storage units. Therefore, mixing of industrial wastes into a manure digester must be evaluated per this document.

Some digesters are not included within the scope of these procedural instructions. These digesters include, but are not limited to:

- Non-farm WPDES permitted digesters (including industrial digesters that use manure as influents) that may already be permitted to accept industrial wastes (industrial liquid wastes and industrial sludges);
- Non-WPDES permitted digesters that do not discharge to the waters of the state (i.e. digestate discharged to collection system of publicly owned wastewater treatment works (POTWs) such as an energy digester); and
- Public Service Commission (PSC) consortium digester [Integrated Anaerobic Digester System Program request for proposal issued January 3, 2017] and other similar digester systems.

Industrial liquid wastes include, but are not limited to, liquid wastes generated by fruit and vegetable processing, dairy processing, mink raising operations, aquaculture, commercial laundromat, motor vehicle cleaning operations, and any other industrial, commercial, or agricultural operation which results in a point source discharge that has no detrimental effects to the soil, vegetation, or groundwater (reference s. NR 214.02(1), Wis. Adm. Code).

Discharges of non-domestic wastewater may be considered industrial liquid wastes (regulated pursuant to ch. 214 Wis. Adm. Code) provided wastes are landspread for beneficial reuse (fertilizer, soil conditioner, etc.) and are non-hazardous (per s. NR 660.10(52), Wis. Adm. Code).

Industrial sludges are the accumulated solids associated with the treatment of industrial waste sources including, but not limited to, liquid wastes generated by fruit and vegetable processing, dairy processing, aquaculture, and any other industrial, commercial, or agricultural operation which results in a point source discharge that has no detrimental effects to the soil, vegetation, or groundwater (referenced from s. NR 214.02(1), Wis. Adm. Code).

Process (industrial sludge) grease is generated from the large-scale food production. There are numerous meat and poultry processors that generate process grease (industrial). Grease is connected through process piping rather than sanitary plumbing. The process piping is not regulated by the plumbing code. Therefore, this waste is considered exempt from ch. NR 113, Wis. Adm. Code requirement.

These procedural instructions do NOT address mixing of other non-farm and/or farm wastes into manure storage units, including, but not limited to:

- 1) Wastes excluded per s. NR 214.02(3) Wis. Adm. Code;
- 2) By-product solids;
- 3) Domestic sewage sludge (biosolids);
- 4) Septage wastes (septic and holding tanks, sanitary grease, portable restrooms, etc.);
- 5) Mixed wastes (examples include, but are not limited to, mixed industrial sludge/industrial liquid wastes, industrial/municipal, and industrial/septage wastes); and
- 6) Farm process wastewater regulated per ch. NR 243, Wis. Adm. Code.

Note: Process wastewater (milkhouse waste, silage leachate, etc.) generated at the agricultural facility (permitted and non-permitted) and mixed into a manure storage unit is typically classified as an agricultural waste. In contrast, process wastewater generated at an industrial facility and mixed as a waste is considered an industrial liquid waste. Wastes

from agricultural and industrial facilities may be characteristically similar, but are regulated pursuant to the type and/or origin of waste generation.

4.0 Background

There are several options available to industrial waste generators to dispose of their waste. Any discharge to the environment may require WPDES permits, treatment, and/or other requirements necessary to protect public health and the waters of the state (surface water and groundwater).

Disposal options for industrial wastes include, but are not limited to the following:

- Privately owned industrial wastewater treatment works,
- Publicly owned wastewater treatment works (POTWs),
- Pretreatment facilities that initially treats the waste prior to discharge to a POTW,
- Other WPDES permitted facilities (example: WPDES permitted contract haulers),
- Licensed landfills (chs. NR 500 through 536, Wis. Adm. Code), and
- WPDES permitted land treatment systems (ch. NR 214, Wis. Adm. Code).

Land treatment systems include multiple methods of utilizing soils and crops to treat industrial liquid waste such that there are no detrimental effects to the soil, vegetation, or groundwater (reference s. NR 214.02(1), Wis. Adm. Code). “Landspreading” and “sludge spreading” are two methods of land treatment; these methods are the focus of this document.

The landspreading and sludge spreading of industrial wastes require waste generators to apply for and receive WPDES permits (Wis. Stats. s. 283.31 and s. NR 214.02(2), Wis. Adm. Code). WPDES permit provisions may include, but are not limited to: site location criteria, vehicle and storage criteria, discharge monitoring and limitations, operating requirements, and soil investigation and groundwater monitoring (reference: ss. NR 214.17 and NR 214.18, Wis. Adm. Code).

Alternatively, landspreading of industrial wastes may be accomplished indirectly by mixing with manure into manure storage units, and landspreading the mixed waste beneficially as a soil conditioner or fertilizer.

Note: Industrial liquid wastes are the most common type of non-farm wastes mixed with manure into manure storage units.

Manure storage units may be owned and operated by farms. These farms may or may not be covered under a WPDES permit. In some cases, industrial wastes are mixed into a manure reception pit or directly into a manure storage unit to liquefy the manure. The addition of industrial waste may help remove blockages and/or reduce bulking of manure within the manure storage unit.

WPDES permitted industrial facilities mix industrial wastes to manure storage units on a routine basis, provided specific requirements are met. Use of manure storage units may require issuance or modification of a WPDES permit (industrial waste generator or permitted farm depending on the applicable scenario). Several scenarios exist for the mixing of industrial liquid wastes and

industrial sludges with manure into a manure storage unit (see Sections 6.0 and 7.0, respectively below).

In the past, the department had difficulty tracking approved manure storage units (accepting industrial wastes). Further, communication and review process inconsistencies within and across department programs have been challenging. The purpose of these procedural instructions is to outline a consistent process for approving the mixing of industrial wastes into manure storage structures. This document outlines:

1. Guidelines for submitting a manure storage unit request package,
2. Department staff roles and responsibilities (submittal review and compliance) between Wastewater and Runoff Management Programs, and
3. Post-approval responsibilities of the WPDES industrial waste generator and/or WPDES permitted farm.

Note: There is no provision in ch. NR 214, Wis. Adm. Code (dated July 2015) for allowing an exemption to mix industrial sludge into manure storage units, unless the manure storage unit is a part of the sludge generator's WPDES permit. In some cases, sludge generators were mistakenly allowed to mix industrial sludge into manure storage units under the "10% exemption" provisions of industrial liquid wastes (reference s. NR 214.17(1), Wis. Adm. Code). Further, inconsistencies in the review process as well as cross program information (regarding permitted farms) dissemination have been challenging. These procedural instructions overcome these issues.

5.0 Request Package Components for Mixing Industrial Wastes into Manure Storage Units

A standardized storage request package is required for all industrial liquid waste and industrial sludge scenarios listed in Sections 6.0 and 7.0, respectively. When a waste generator desires approval for disposing industrial wastes into multiple manure storage units, then the waste generator must submit a request package for each manure storage unit (even if the manure storage units are in the same general location).

Typically, an industrial waste generator requesting to mix industrial liquid wastes into a manure storage unit must provide the following information in a storage request package:

- 1) *Request Form.* Completed Form # 3400-196 "Notice of Intent to Store Industrial Wastes in Existing Off-Site Manure Storage Structures" (see Appendix A).
- 2) *Design Documentation.* Signed and stamped documentation from a Wisconsin registered professional engineer indicating that construction of storage unit complies with the requirements from ch. NR 213, Wis. Adm. Code or documentation that the manure storage unit meets NRCS 313 (2/86), 425 (10/83), or equivalent design standards (pursuant to ch. NR 214.17(1), Wis. Adm. Code).

Note: Equivalent design standards may include the design standards that were in place at the time of construction for each manure storage unit, provided the unit was constructed according to those standards or more recent standards.

- 3) *Storage Unit Identification*. Manure storage unit location relative to other onsite units. Example: Aerial photographs and “up-close” photographs showing identifying characteristics help to identify the requested manure storage unit.
- 4) *Waste Type*. General waste description (type of industry process(es) and all sources of wastewater that may be mixed into the manure storage unit).
- 5) *Waste Characteristics*. Test results of a representative sample of waste from waste generator (see Appendix B).
- 6) *Chemicals*. Identification of any chemicals that may be present in the wastewater and all relevant data safety sheets.
- 7) *Waste Source(s)*. Verify all waste sources (industrial, municipal, or septage, etc.) mixed into the manure storage unit.
 - A. **IMPORTANT**: Mixing of multiple non-farm waste sources may require an individual WPDES permit or permit modification of existing WPDES permit. The WPDES permit may include additional requirements and limitations pursuant to administrative codes for all wastes mixed within the manure storage unit.
 - B. **IMPORTANT**: For non-permitted farms to comply with the s. NR 214.17(1), Wis. Adm. Code “10% exemption,” the department assumes one wastewater source per manure storage unit.

Note: It is the ultimately the responsibility of the industrial liquid waste generator to ensure that the volume of their mixture combined with the volume of any other industrial liquid waste mixed into the manure storage structure does not exceed 10% of the volume of the mixture at the time it is landsread per s. NR 214.17(1) Wis. Adm. Code. The department recommends that only one waste generator be approved per manure storage unit.

- C. **IMPORTANT**: Some WPDES permitted contract haulers have requested a client confidentiality agreement with the department.
 1. This confidentiality agreement protects the identities of influent client(s) for the permitted contract hauler, when the waste is mixed and stored with other wastes of the permitted contract hauler. Under the situation where the permitted contract hauler pumps waste from a mixed outfall to a manure storage unit, the permitted contract hauler’s outfall is reported, rather than the influent client(s)’ outfall.
 2. In the case where industrial liquid wastes are transported and mixed directly from the waste generator’s facility to the manure storage unit, the waste generator’s confidentiality is not protected under the contract hauler’s confidentiality agreement because the generator’s waste is not proprietary or a trade secret. If the waste generator does not have a WPDES permit, then the waste generator must apply for a WPDES (land application) permit.
- 8) *Permitting Application*. If necessary, the waste generator must submit a WPDES permit application, or request a WPDES permit modification.
- 9) *WPDES Permitted Farm Requirements*. Request packages must contain the 180-day storage capacity calculation worksheet (Appendix C), demonstrating 180-day storage capacity of the manure storage unit. This calculation includes all wastes mixed into the

storage unit including, but not limited to manure, leachate, collected stormwater, and industrial wastes (industrial liquid wastewater and industrial sludge).

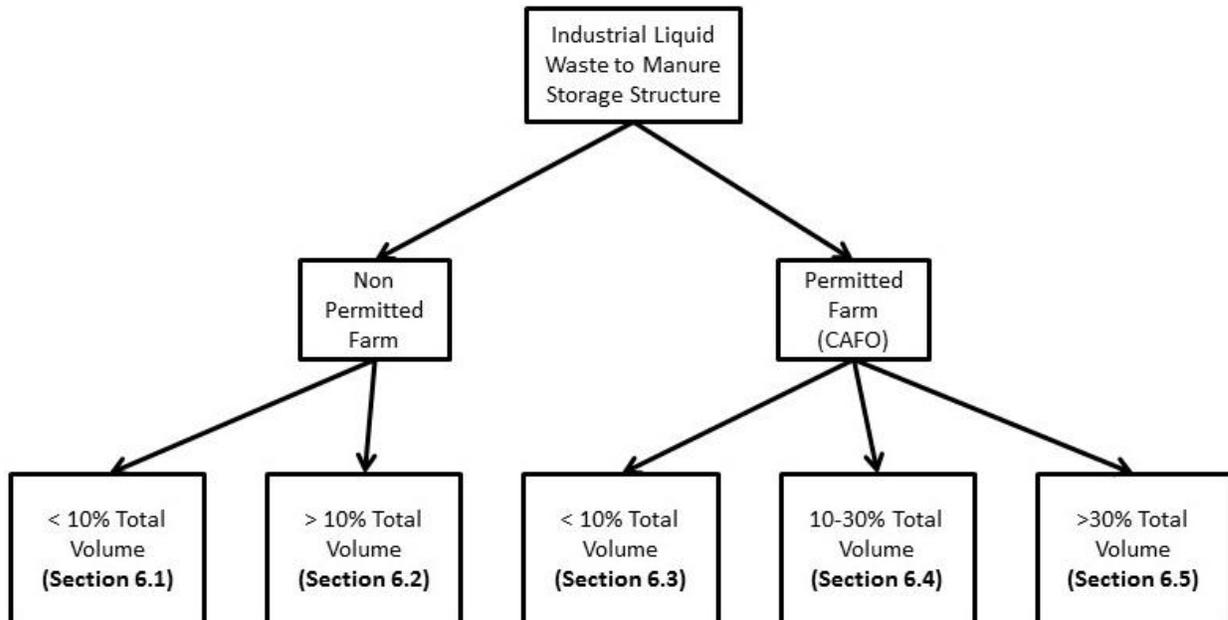
Note: Mixing of industrial wastes into a CAFO's manure storage unit is only permissible if adequate winter storage capacity (180 days) is available.

6.0 Industrial Liquid Waste Storage Scenarios: Department Review Process & Waste Generator/Farm Responsibilities

Different storage scenarios exist depending on the type of facility (non-permitted farms and permitted farms) and the percent volume of industrial liquid waste mixed into a manure storage unit.

- 1) Non-Permitted Farms with Total Industrial Liquid Waste <10% Total Volume (Section 6.1)
- 2) Non-Permitted Farms with Total Industrial Liquid Waste >10% Total Volume (Section 6.2)
- 3) Permitted Farms with Total Industrial Liquid Waste <10% Total Volume (Section 6.3)
- 4) Permitted Farms with Total Industrial Liquid Waste 10-30% Total Volume (Section 6.4)
- 5) Permitted Farms with Total Industrial Liquid Waste >30% Total Volume (Section 6.5)

Industrial Liquid Waste Storage Scenarios



The storage scenarios below outline the review and approval process for department staff as well as outline the responsibilities of the wastewater generator and/or permitted farm once the manure storage unit has been approved by the department.

6.1 Non-Permitted Farms with Total Industrial Liquid Waste <10% Total Volume

Pursuant to s. NR 214.17(1), Wis. Adm. Code, an exemption allows discharging low volume industrial liquid waste (<10% total volume of manure storage unit) to non-permitted farms. This exemption states:

“Industrial liquid wastes mixed into liquid manure at a volume less than 10% of the volume of the mixture at the time it is landspread may be exempted in writing by the department on a case-by-case basis from the requirements of s. NR 214.17(2), (3), (4) and (7) if the liquid waste mixture has beneficial properties as a soil conditioner or fertilizer, is applied in accordance with accepted agricultural practices, and does not cause detrimental effects. However, liquid manure storage facilities used to store less than 10% industrial liquid waste shall meet the USDA SCS technical bulletin section IV design criteria 313 (2/86) or 425 (10/83) [now NRCS 313 standards] or equivalent sealing specifications acceptable to the department.”

Note: Equivalent storage unit sealing specifications acceptable to the department include, but are not limited to chs. NR 110 and NR 213, Wis. Adm. Codes.

A. Wastewater Program—Internal Review Process

1. *New requests for manure storage units.* For new manure storage unit storage requests, a review may be completed by either a Wastewater specialist or a Wastewater engineer. Once the review has been completed, the Wastewater specialist/engineer sends an approval or denial letter to the liquid waste generator (see Appendix D). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information (approved or denied) into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

In subsequent years, the assigned Wastewater program regulator reviews the WPDES industrial liquid waste generator’s 3400-052 (“Other Method of Disposal”) reports, responds to any complaints regarding the manure storage unit, verifies compliance, and provides and addresses internal and external information requests. If the County Land and Water Conservation Department determines that mixed waste is not landspread in accordance with accepted agricultural practices, then the Wastewater regulator may rescind authorization to mix industrial liquid wastes into the manure storage unit and/or consider stepped enforcement.

2. *Manure Storage Unit Approval Confirmation.* If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule,

the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Department staff reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Wastewater specialist/engineer sends an approval confirmation or denial letter to the industrial liquid waste generator (see Appendix D). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer.

B. Industrial Liquid Waste Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the industrial liquid waste generator include:

- 1) *Land Application Management Plan.* Update the facility's land application management plan to include the manure storage unit pursuant to s. NR 214.17(6)(c), Wis. Adm. Code.
- 2) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations.* Verify total contents of manure storage unit are <10% industrial wastewater (see Appendix G).
- 6) *Annual Report.* Submit the 3400-052 "Other Methods of Disposal or Distribution" report. This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
- 7) *Additional Non-Farm Waste.* Communicate with manure storage unit owner, and confirm that any additional non-farm waste sources into the manure storage unit. For non-

permitted farms to comply with the s. NR 214.17(1), Wis. Adm. Code “10% exemption,” the department assumes one wastewater source per manure storage unit.

Note: It is the ultimately the responsibility of the industrial liquid waste generator to ensure that the volume of their mixture combined with the volume of any other industrial liquid waste mixed into the manure storage structure does not exceed 10% of the volume of the mixture at the time it is landspread per s. NR 214.17(1) Wis. Adm. Code. The department recommends that only one waste generator be approved per manure storage unit.

- 8) *Manure Storage Unit Integrity Check.* Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial liquid waste generators must cease use of the manure storage structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 9) *Land Application from Manure Storage Unit.* Communicate and evaluate that the farmer is landspreading the mixed waste (manure + industrial liquid waste) in accordance with accepted agricultural practices, and the landspreading does not cause detrimental impacts to waters of the state or public health.

Note: The manure storage unit owner may be required to follow other regulations and/or implement a NRCS 590 NMP.

6.2 Non-Permitted Farms with Total Industrial Liquid Waste >10% Total Volume

There is no codified exemption to ch. NR 214 Wis. Adm. Code for mixing >10% total volume industrial liquid waste into manure storage units. If the permittee requests >10% mixing (total volume), then the waste generator becomes responsible for the storage and landspreading of the mixed waste under its WPDES permit.

The entire manure storage unit and associated landspreading activities are regulated under ch. NR 214, Wis. Adm. Code, including prior department approval of landspreading sites (Wis. Adm. Code s. NR 214.17(2)). The industrial liquid waste generator must request a WPDES permit modification to include this manure storage unit. If more than one manure storage unit contains >10% total volume, then each manure storage unit is assigned a land application outfall in the modified WPDES permit.

Note: Under this storage scenario, the manure storage unit may be approved to mix different industrial wastes (i.e. acceptance of more than one industrial liquid waste, industrial sludge, etc.). On a case-by-case basis, additional monitoring and/or limitations may be factored into the WPDES permit (per sections NR 214.17(5) and NR 214.18(5), Wis. Adm. Code).

A. Wastewater Program—Internal Review Process.

1. *New requests for manure storage units.* For new manure storage unit requests, plans and specification review is completed by a Wastewater engineer (review meets ch. NR 213 Wis. Adm. Code requirements). Once the review is completed, the Wastewater engineer sends an approval or denial letter to the wastewater generator (see Appendix H). If approved, the assigned department regulator coordinates with permit drafter to modify/reissue the facility’s WPDES permit to include the new storage structure, outfall sample point, and monitoring requirements. A copy of this letter is transmitted to the regional department non-point source coordinator and county land conservationist. The Wastewater engineer or department regulator enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

In subsequent years, the assigned department regulator reviews the WPDES facility’s 3400-055 (“Annual Land Application”) and 3400-052 (“Other Method of Disposal”) reports, responds to complaints regarding the storage unit, verifies compliance, and provides and addresses internal and external information requests.

2. *Manure Storage Unit Approval Confirmation.* If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: The department’s permit drafter should verify that the WPDES permit includes the standard manure storage unit (“pit”) exemption language in the “Land Application” section of the draft WPDES permit.

Note: The department’s permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator’s draft “Fact Sheet.” Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator’s manure storage unit(s);*
- *There have been identified compliance issues for the waste generator’s manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Wastewater specialist/engineer sends an approval confirmation or denial letter to the industrial liquid waste generator (see Appendix H). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

B. Industrial Liquid Waste Generator Responsibilities (Post Manure Storage Unit Approval)

The industrial liquid waste generator must request a WPDES permit modification. The WPDES permit modification is needed to add new storage unit and outfall sample location (sample point will contain monitoring/limitations based on volume mixed to storage unit, capacity of storage unit, concentration of waste mixed, etc.). The storage unit cannot be used by the industrial liquid waste generator until the permit modification has been completed.

Once approved, requirements for the industrial liquid waste generator include:

- 1) *Land Application Management Plan.* Update the facility’s land application management plan to include the manure storage unit per s. NR 214.17(6)(c), Wis. Adm. Code.
- 2) *WPDES Permit Sampling.* Sample mixed wastes per WPDES permit requirements.
- 3) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 4) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 5) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 6) *Annual Report.* Submit the 3400-055 “Annual Land Application” report. This report is due January 31, following the year in which mixed waste (industrial liquid waste + manure) is landspread from the manure storage unit.
- 7) *Additional Non-Farm Waste.* Verify with manure storage unit owner that only authorized waste sources are mixed into the manure storage unit.

Note: The liquid waste generator notifies the department if additional waste sources are identified.

- 8) *Maintenance.* Regularly inspect and maintain the storage unit per ch. NR 213, Wis. Adm. Code requirements. If issues are noted, the waste generator should contact the department.

Note: The manure storage unit owner may be required to follow other regulations and/or implement a NRCS 590 NMP.

6.3 Permitted Farms with Total Industrial Liquid Waste <10% Total Volume

Pursuant to s. NR 214.17(1), Wis. Adm. Code, an exemption allows discharging low volume industrial wastewater (<10% total volume of manure storage unit) to CAFOs. This exemption states:

“Industrial liquid wastes mixed into liquid manure at a volume less than 10% of the volume of the mixture at the time it is landspread may be exempted in writing by the department on a case-by-case basis from the requirements of s. NR214.17(2), (3), (4) and (7) if the liquid waste mixture has beneficial properties as a soil conditioner or fertilizer, is applied in accordance with accepted agricultural practices, and does not cause detrimental effects. However, liquid manure storage facilities used to storage less than 10% industrial liquid waste shall meet the USDA SCS technical bulletin section IV design criteria 313 (2/86) or 425 (10/83) [now NRCS 313 standards] or equivalent sealing specifications acceptable to the department.”

In many cases, the requirements of ch. NR 214, Wis. Adm. Code are typically less stringent than the requirements of ch. NR 243, Wis. Adm. Code. Pursuant to s. NR 243.18, Wis. Adm. Code, mixed waste (manure including agricultural process wastewater + industrial liquid waste) shall be stored and land applied in accordance with ch. NR 243, Wis. Adm. Code.

Mixed waste may be required to meet chs. NR 213 and NR 214, Wis. Adm. Codes. Once the department approves the disposal of industrial liquid wastes into the WPDES permitted farm storage unit, the mixed waste in the storage unit and the landspreading of the mixed waste must be covered under the farm’s WPDES permit. A farm’s WPDES permit typically contains standards for mixed wastes found in ss. NR 243.16 through NR 243.18, Wis. Adm. Code. In any case, the Runoff Management specialist verifies the permitted farm is in compliance with its WPDES permit and NMP prior to acceptance of industrial liquid waste into the manure storage unit.

A. Wastewater Program—Internal Review Process.

For new manure storage requests, Wastewater staff notifies the assigned Runoff Management specialist of the request, and initially reviews the request package. This initial review may be completed by either a Wastewater specialist or Wastewater engineer. Once the review is complete, comments are sent to the Runoff Management specialist. The Runoff Management specialist is responsible for formally approving/denying the request (see below). The Wastewater specialist/engineer enters the manure storage unit information (approved or denied) into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

In subsequent years, the assigned Wastewater program regulator reviews the WPDES industrial liquid waste generator’s 3400-052 (“Other Method of Disposal and Distribution”) report. The Wastewater program regulator notifies the Runoff Management specialist of any complaints regarding the storage unit.

B. Runoff Management Program—Internal Review Process

1. *New requests for manure storage units.* For new manure storage requests, the assigned Runoff Management specialist coordinates with Wastewater staff to review the storage request package. Once the review is complete, the Runoff Management specialist sends an approval or denial letter to the wastewater generator and CAFO authorized representative (see Appendix I). The Runoff Management specialist also reviews the updated NMP and 180-day storage calculation submitted by the CAFO that accounts for the new waste source added to the manure storage unit.

Considerations for approval include, but are not limited to, the following:

- 1) CAFO's current and past compliance status regarding manure and process wastewater management,
- 2) CAFO's verification to maintain both a minimum of 180 days of storage capacity and adequate land base to support acceptance of off-site wastes, and
- 3) CAFO's use of alternative treatment systems prior to disposal of off-site wastes into manure storage units (i.e. digester).

In subsequent years the Runoff Management specialist evaluates and verifies that industrial liquid waste taken into a CAFO's storage is unit <10% (Appendix G). This evaluation likely occurs during the permit reissuance process or during annual report review. The Runoff Management specialist responds to complaints (if applicable), and verifies that no unauthorized sources are being mixed into the storage unit. The Runoff Management specialist is responsible for any land application complaints regarding the CAFO's manure storage unit.

2. Manure Storage Unit Approval Confirmation. If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the permitted farm's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design

standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff (both Wastewater and Runoff Management program) reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Runoff Management specialist sends an approval confirmation or denial letter to the industrial liquid waste generator (see Appendix I). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

C. Industrial Liquid Waste Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the industrial liquid waste generator include:

- 1) *Land Application Management Plan.* Update the facility’s land application management plan to note industrial liquid waste is being sent to a permitted farm per s. NR 214.17(6)(c), Wis. Adm. Code.
- 2) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations.* Verify total contents of manure storage unit are <10% industrial liquid waste (see Appendix G),
- 6) *Annual Report.* Submit the 3400-052 “Other Methods of Disposal or Distribution” report. This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
- 7) *Manure Storage Unit Integrity Check.* Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial liquid waste generators must cease use of the manure storage structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 8) *Application from Manure Storage Unit.* The department recommends that the industrial liquid waste generator communicate and evaluate that the CAFO is land applying the mixed waste (manure + industrial liquid waste) in accordance with accepted agricultural practices (NMP) and does not cause detrimental impacts to waters of the state or public health.

D. Permitted Farm Responsibilities (Post Manure Storage Unit Approval)

The CAFO is required to update their NMP to account for the increased waste volume and update the farm’s 180-day manure storage calculation spreadsheet (refer to Appendix C). The CAFO must periodically request analytical results and disposal logs from the waste generator as well as verify that the total volume of the storage unit is <10% industrial liquid waste. The CAFO should

regularly inspect and maintain the storage unit. The mixed waste (manure + industrial liquid waste) in the storage structure and the land application of the mixed waste must be covered under the CAFO's WPDES permit.

6.4 Permitted Farms with Total Industrial Liquid Waste 10-30% Total Volume

There is no codified exemption to ch. NR 214 Wis. Adm. Code for mixing >10% total volume industrial liquid waste into manure storage units. However, the requirements of ch. NR 214, Wis. Adm. Code are typically less stringent than the requirements of ch. NR 243, Wis. Adm. Code. Pursuant to s. NR 243.18, Wis. Adm. Code, mixed waste (manure including agricultural process wastewater + industrial liquid waste) shall be stored and land applied in accordance with ch. NR 243, Wis. Adm. Code.

A WPDES permitted industrial liquid waste generator with an approved landspreading outfall may dispose of its liquid waste at any WPDES permitted facility (including WPDES permitted farms), provided the accepting facility's WPDES permit allows the acceptance of the waste, where by the total mixing of industrial liquid wastes is less than 30% total volume and all other applicable permit requirements are met.

Mixed waste may be required to meet chs. NR 213 and NR 214, Wis. Adm. Code. Once the department approves the disposal of industrial liquid wastes into the WPDES permitted farm storage unit, the mixed waste in the storage unit and the landspreading of the mixed waste must be covered under the farm's WPDES permit. A farm's WPDES permit typically contains standards for mixed wastes found in ss. NR 243.16 through NR 243.18, Wis. Adm. Code. In any case, the Runoff Management specialist verifies the permitted farm is in compliance with its WPDES permit and NMP prior to acceptance of industrial liquid waste into the manure storage unit.

Note: The characteristics of the mixed waste significantly change when the industrial liquid waste intake exceeds 30% total volume. In these cases, a WPDES permit modification may be necessary to include additional provisions of chs. NR 213 and NR 214 Wis. Adm. Code.

For mixing <30% total volume of industrial liquid waste, requirements of NRCS Standard 590 and ch. NR 243 Wis. Adm. Code may be more stringent, and may be used in lieu of several requirements as required by chs. NR 213 and NR 214 Wis. Adm. Code. Several examples are provided below.

Nutrient Management Plan Example: A NMP per s. NR 243.14 Wis. Adm. Code requires similar vertical and horizontal setbacks to restrictive features as well as an agronomic nitrogen limitation. In addition, s. NR 243.14 Wis. Adm. Code contains more stringent limits such as phosphorus application limitations. Land application fields must be registered under the NMP; this is comparable to department review of ch. NR 214 Wis. Adm. Code land application fields.

Manure Storage Unit Evaluation Example: Section NR 243.16 Wis. Adm. Code requires evaluation (by a qualified individual such as a professional engineer) of any manure storage

unit. This evaluation is similar to ch. NR 213 Wis. Adm. Code plans and specification review of industrial waste storage units.

Combined Waste Example: Under s. NR 243.18 Wis. Adm. Code, requires combined waste (manure including process wastewater + other waste not generated by farm operation) to be stored and land applied in accordance with ch. NR 243 Wis. Adm. Code. In other words, once the Department approves the disposal of industrial liquid wastes into the CAFO storage structure, the storage and landspreading of the mixed waste must be covered under the CAFO permit.

A. Wastewater Program—Internal Review Process

For new manure storage requests, Wastewater staff notifies the assigned Runoff Management specialist of the request, and initially reviews the request package. This review may be completed by either a Wastewater specialist or Wastewater engineer. Once the review is complete, comments are sent to the Runoff Management specialist. The Runoff Management specialist is responsible for formally approving/denying the request (see below). The Wastewater specialist/engineer then enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

In subsequent years the assigned department regulator reviews the waste generator’s 3400-052 (“Other Methods of Disposal or Distribution”) report. The Wastewater regulator notifies the Runoff Management specialist of any complaints regarding the storage unit. Information about this unit is provided to internal and external entities upon request. The Runoff Management specialist is responsible for any land application complaints regarding the CAFO’s manure storage unit.

B. Runoff Management Program—Internal Review Process

1. *New requests for manure storage units.* For new manure storage requests, the assigned Runoff Management specialist with Wastewater staff to review the storage request package. Once the review is complete, the Runoff Management specialist sends an approval or denial letter to the wastewater generator (see Appendix I). The Runoff Management specialist also reviews the updated NMP and 180-day storage calculation (Appendix C) submitted by the CAFO that accounts for the new waste source added to the manure storage unit.

Considerations for approval include, but are not limited to, the following:

- 1) CAFO’s current and past compliance status regarding manure and process wastewater management,
- 2) CAFO’s verification to maintain both a minimum of 180 days of storage capacity and adequate land base to support acceptance of off-site wastes, and
- 3) CAFO’s use of alternative treatment systems prior to disposal of off-site wastes into manure storage units (i.e. digester).

In subsequent years, the Runoff Management specialist evaluates and verifies that industrial liquid waste storage is $\leq 30\%$. This evaluation likely occurs during the permit reissuance process or annual report review. The Runoff Management specialist responds to complaints (if applicable), and verifies that no unauthorized sources are being mixed into the storage unit.

2. *Manure Storage Unit Approval Confirmation.* If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the permitted farm's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff (both Wastewater and Runoff Management program) reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Runoff Management specialist sends an approval confirmation or denial letter to the industrial liquid waste generator (see Appendix I). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer.

C. Industrial Liquid Waste Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the liquid waste generator include:

- 1) *Land Application Management Plan*. Update the facility's land application management plan to include the manure storage unit.
- 2) *Analytical Results*. Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification*. Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report*. Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations*. Verify total contents of manure storage unit are $\leq 30\%$ industrial liquid waste (see Appendix G),
- 6) *Annual Report*. Submit the 3400-052 "Other Methods of Disposal or Distribution" report. This report is due January 31, following the year in which industrial liquid wastes are mixed into manure storage units.
- 7) *Manure Storage Unit Integrity Check*. Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial liquid waste generators must cease use of the manure storage structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 8) *Application from Manure Storage Unit*. The department recommends that the industrial liquid waste generator communicate and evaluate that the CAFO is land applying the mixed waste (manure + liquid waste) in accordance with accepted agricultural practices (NMP) and does not cause detrimental impacts to waters of the state or public health.

D. Permitted Farm Responsibilities (Post Manure Storage Unit Approval)

The CAFO is required to update their NMP to account for the increased waste volume and update the farm's 180-day manure storage calculation spreadsheet (see Appendix C). The CAFO must periodically request analytical results and disposal logs from the waste generator as well as verify that the total volume of the storage unit is $< 30\%$ industrial liquid waste. The CAFO should regularly inspect and maintain the storage unit. The mixed waste (manure + industrial liquid waste) in the storage structure and the land application of the mixed waste must be covered under the CAFO's WPDES permit.

Note: CAFOs may accept industrial liquid waste from multiple sources, provided the total volume is $\leq 30\%$ total volume. The CAFO must keep accurate records of the volume of offsite wastes taken.

6.5 Permitted Farms with Total Industrial Liquid Waste $> 30\%$ Total Volume

There is no codified exemption to ch. NR 214 Wis. Adm. Code for discharging $> 10\%$ total volume industrial liquid waste into manure storage units. A WPDES permitted industrial liquid waste generator with an approved landspreading outfall may dispose of its industrial liquid waste at any

WPDES permitted facility (including WPDES permitted farms) provided the accepting facility's WPDES permit allows the acceptance of the industrial liquid waste.

Contributions of significant volume (>30% total volume) of industrial liquid waste into a manure storage unit will likely impact the characteristics of the mixed waste. Requirements pursuant to chs. NR 213, NR 214, and NR 243, Wis. Adm. Codes, are included in the farm's WPDES permit (Appendix J). In these cases, a WPDES permit modification is necessary. The WPDES permit is reviewed for compliance prior to acceptance of industrial liquid waste into the manure storage unit.

In addition to all ch. NR 243, Wis. Adm. Code requirements, the WPDES permitted farm is required to meet all ch. NR 214, Wis. Adm. Code landspreading requirements including site location criteria (s. NR 214.17(2), Wis. Adm. Code), vehicle and storage criteria (s. NR 214.17(3), Wis. Adm. Code), discharge limitations (s. NR 214.17(4), Wis. Adm. Code), monitoring (s. NR 214.17(5), Wis. Adm. Code), and operation requirements (s. NR 214.17(6), Wis. Adm. Code). Fields are approved and inventoried by the department.

Additional monitoring and limitation may be warranted for potential pollutants present in mixed waste (manure + industrial liquid waste) outfall per ss. NR 214.17(5) and NR 243.18, Wis. Adm. Code. Chloride monitoring is likely, given the significant chloride concentration typically present in most industrial liquid waste. Wastewater and Runoff Management staff should also reference Appendix B to determine if any other potential pollutants warrant sampling in the mixed waste.

The requirements of the NRCS 590 Standard and ch. NR 243, Wis. Adm. Code may be more stringent for mixing >30% total volume. The WPDES permit may include these more stringent requirements in lieu of several requirements of chs. NR 213 and NR 214, Wis. Adm. Code.

A. Wastewater Program—Internal Review Process

For new manure storage requests, Wastewater staff notifies the assigned Runoff Management specialist of the request, and initially reviews the request package. This review may be completed by either a Wastewater specialist or Wastewater engineer. Once the review is complete, comments are sent to the Runoff Management specialist. The Runoff Management specialist is responsible for formally approving/denying the request. If approved, the Wastewater specialist/engineer enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer. The Wastewater regulator may need to assist the Runoff Management specialist with incorporating relevant ch. NR 214 Wis. Adm. Code requirements during permit drafting or permit modification.

The assigned Wastewater regulator reviews the waste generator's 3400-052 ("Other Method of Disposal") report annually. The Wastewater regulator notifies the Runoff Management specialist of any complaints received regarding the storage unit.

Fields must be approved in SWAMP, and cataloged in the LAG "Permitted Fields" layer.

B. Runoff Management Program—Internal Review Process

1. *New requests for manure storage units.* For new manure storage requests, the assigned Runoff Management specialist coordinates with Wastewater staff to review the storage request package.

Once the review is complete, the Runoff Management specialist sends an approval or denial letter to the wastewater generator and CAFO authorized representative.

Note: These procedural instructions do not contain a template approval/denial letter for the acceptance of >30% (total volume) industrial liquid wastes into manure storage units.

If approved, the Runoff Management specialist modifies the WPDES permit to include ch. NR 214 Wis. Adm. Code requirements and public notices the updated permit. The Runoff Management specialist also reviews the updated NMP and 180-day storage calculation submitted by the CAFO that accounts for the new waste source added to the manure storage unit.

Considerations for approval include, but are not limited to, the following:

- 1) CAFO's current and past compliance status regarding manure and process wastewater management,
- 2) CAFO's verification to maintain both a minimum of 180-days of storage capacity and adequate land base to support acceptance of off-site wastes, and
- 3) CAFO's use of alternative treatment systems prior to disposal of off-site wastes into manure storage units (i.e. digester).

The Runoff Management specialist evaluates and verifies the total industrial liquid waste storage volume is within approved limits. This evaluation likely occurs during the permit reissuance or annual report review. The Runoff Management specialist responds to complaints (if applicable) and verifies that only authorized sources are being mixed into the storage unit.

2. Manure Storage Unit Approval Confirmation. If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*

- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Wastewater specialist/engineer sends an approval confirmation or denial letter to the industrial liquid waste generator. A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

C. Industrial Liquid Waste Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the industrial liquid waste generator include:

- 1) *Land Application Management Plan.* Update the facility’s land application management plan to include the manure storage unit.
- 2) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations.* Verify total contents of manure storage unit are $\geq 30\%$ industrial wastewater (see Appendix G),
- 6) *Annual Report.* Submit the 3400-052 “Other Methods of Disposal or Distribution” report. This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
- 7) *Manure Storage Unit Integrity Check.* Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial liquid waste generators must cease use of the manure storage structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 8) *Application from Manure Storage Unit.* The department recommends that the industrial liquid waste generator communicate and evaluate that the CAFO is land applying the mixed waste (manure + industrial liquid waste) in accordance with accepted agricultural practices (NMP) and does not cause detrimental impacts to waters of the state or public health.

D. Permitted Farm Requirements. The CAFO requests a WPDES permit modification, unless the current WPDES permit already contains ch. NR 214 Wis. Adm. Code requirements. The CAFO also updates their NMP to account for the increased mixed waste volume to be land applied. The NMP includes any additional ch. NR 214, Wis. Adm. Code landspreading requirements that are more stringent than ch. NR 243, Wis. Adm. Code (see Appendix J). The department recommends that the CAFO periodically request analytical results and disposal logs from waste generator as well as verify that the total industrial liquid waste mixed into the manure storage unit. Regular inspection and maintenance of the manure storage unit is expected.

Note: CAFOs may accept industrial liquid waste from approved multiple sources, provided that the CAFO maintains accurate records of the volume of non-farm wastes received.

6.6 Emergency Maintenance Events

In emergency situations, some owners of unapproved manure storage units elect to receive industrial liquid wastes prior to department approval. This unauthorized industrial liquid waste mixed into the manure storage unit may create potential compliance issues for both the waste generator and the storage unit owner.

Infrequently, non-permitted and permitted farms receive small quantities of industrial liquid waste to help remove blockages (frozen lines, clogs due to high % solid material, etc.) in discharge lines to manure storage units. These mixing events typically contribute significantly less than 1% of the total volume mixed into the manure storage unit. If mixing of industrial liquid wastes into the manure storage unit is without department approval, the department recommends that the wastewater generator and manure storage unit owner observe the following guidelines:

- 1) *Industrial Liquid Waste Origin.* Industrial liquid waste originates from a WPDES permitted facility with a liquid waste land application outfall.
- 2) *Waste Characteristics.* Industrial liquid waste does not contain any hazardous substances (refer to Tables 1 and 2 in Appendix B).
- 3) *Pathogens.* Industrial liquid waste does not contain any pathogens (domestic waste, meat and poultry rendering wastes, etc.).
- 4) *Emergency Mixing Event Notification.* The WPDES permitted industrial liquid waste generator notifies the DNR regulator no later than 48 hours after the material is placed in manure line or storage unit. This notification must include the total volume mixed to the manure storage unit.
- 5) *Minimal Mixing.* The department recommends the storage owner use the minimum volume needed to rectify the emergency event. Typical emergency mixing events rarely exceed 10,000 gallons/manure storage unit/year.
- 6) *Mixing Log.* The WPDES permitted industrial liquid waste generator logs the mixing event (see Appendix F).
- 7) *Annual Report.* Industrial liquid waste mixed in the manure storage unit is reported on the waste generator's 3400-052 ("Other Methods of Disposal or Distribution" report).

This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.

- 8) *Volume Verification*. Waste generator verifies that the total contents of the manure storage unit is <10% industrial liquid waste (Appendix G).
- 9) *Event Frequency*. Mixing frequency is limited to no more than two emergency maintenance events/manure storage unit/year.

After the emergency maintenance event, the department may require the WPDES permitted industrial liquid waste generator to submit a storage request package per one of the five storage scenarios listed in these procedural instructions (refer to Section 6.0) under these example situations:

- Mixing events are frequent or common practice (greater than two events/year),
- A significant volume of industrial liquid waste is mixed into the manure storage unit (e.g., exceeding 10,000 gallons/manure storage unit/year), or
- Significant compliance issues are identified with either the WPDES permitted waste generator or the farm.

If emergency mixing events are repetitive or significant volumes of industrial liquid waste are added to an unapproved manure storage unit, stepped enforcement may be considered.

7.0 Industrial Sludge Storage Scenarios: Dept. Review Process & Waste Generator/Farm Responsibilities

Two main factors determine the applicable scenario for mixing of industrial sludge into manure storage units:

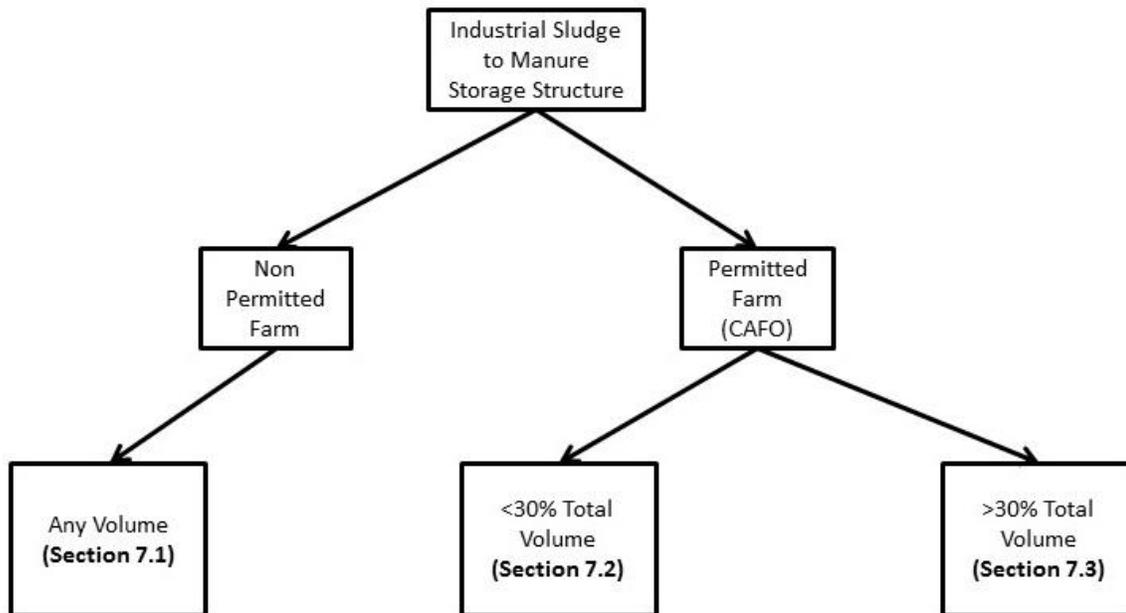
- 1) Farm classification (WPDES permitted farm, nonpermitted farm, dairy), and
- 2) Percent contribution of industrial sludge into the manure storage unit.

The storage scenarios provided below outline specific request package submittal requirements, review and approval process for department staff, and responsibilities of the waste generator and/or permitted farm once the manure storage unit has been approved by the department.

Industrial sludge storage scenarios include:

- 1) Non-Permitted Farm Accepting Industrial Sludge—Any Volume (Section 7.1)
- 2) Permitted Farm Accepting Industrial Sludge <30 Total Volume (Section 7.2)
- 3) Permitted Farm Accepting Industrial Sludge >30% Total Volume (Section 7.3)

Industrial Sludge Storage Scenarios



Note: If a non WPDES permitted farm is required to create and implement a NRCS 590 nutrient management plan pursuant to ATCP 50 or pursuant to local requirements, the industrial sludge contribution must be included in the NRCS 590 NMP and the industrial sludge generator is responsible for compliance with sludge spreading of the mixed waste pursuant to the WPDES permit issued to the waste generator AND consistent with s. NR 214.18, Wis. Adm. Code.

7.1 Non-Permitted Farm Accepting Industrial Sludge—Any Volume

There is not a codified exemption to s. NR 214.18, Wis. Adm. Code for mixing <10% total volume industrial sludge into manure storage units. If the permittee requests mixing of industrial sludge into a manure storage unit, then the waste generator becomes responsible for the storage and landspreading of the complete mixed waste content of the manure storage unit under the industrial sludge generator’s WPDES permit.

IMPORTANT: When the manure storage unit is approved under the sludge generator’s WPDES permit, the manure storage unit owner is still required to include industrial sludge into a NRCS 590 NMP (if applicable).

The entire manure storage unit and associated landspreading activities are regulated under chs. NR 213 and NR 214, Wis. Adm. Code, including prior department approval of landspreading sites (s. NR 214.18(2), Wis. Adm. Code). The sludge generator must request a WPDES permit modification to include this manure storage unit. If the sludge generator desires to store sludge in multiple manure storage units, then each manure storage unit is assigned a land application outfall in the modified WPDES permit.

Note: Under this scenario, the manure storage unit may be approved to mix different industrial wastes (i.e. acceptance of more than one industrial liquid waste, industrial sludge, etc.). On a case-by-case basis, additional monitoring and/or limitations may be factored into the WPDES permit (s. NR 214.18(4), (5), Wis. Adm. Code).

Note: The department has developed a streamlined exemption for the mixing of small volumes of industrial sludge into manure storage units. See Section 8.0 below for more details.

A. Wastewater Program—Internal Review Process.

1. *New requests for manure storage units.* For new manure storage unit storage requests, plans and specification review is completed by a Wastewater engineer (review meets ch. NR 213, Wis. Adm. Code requirements). Once plan and specification review is complete, the Wastewater engineer will send an approval or denial letter to the sludge generator (Appendix H). If approved, the assigned department regulator coordinates with permit drafter to modify/reissue the facility's WPDES permit to include the new storage structure, outfall sample point, and monitoring requirements. A copy of this letter is transmitted to the regional department Non-Point Source Coordinator and County Land Conservationist. The Wastewater engineer or department regulator enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer.

In subsequent years, the assigned department regulator reviews the WPDES facility's 3400-055 ("Annual Land Application") and 3400-052 ("Other Method of Disposal or Distribution") reports, responds to complaints regarding the storage unit, verifies compliance, and provides and addresses internal and external information requests.

2. *Manure Storage Unit Approval Confirmation.* If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff reviews the reauthorization request packages. Once plan and specification review is complete, the Wastewater engineer will send an approval or denial letter to the sludge generator (Appendix H). A copy of this letter is transmitted to the regional department Non-Point Source Coordinator and County Land Conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer.

B. Industrial Sludge Generator Responsibilities (Post Manure Storage Unit Approval)

The industrial sludge generator must request a WPDES permit modification. The WPDES permit modification is needed to add new storage unit and outfall sample location (sample point will contain monitoring/limitations based on volume mixed to storage unit, capacity of storage unit, concentration of waste mixed, etc.). The storage unit cannot be used by the waste generator until the permit modification has been completed.

Once approved, requirements for the industrial sludge generator include:

- 1) *Land Application Management Plan.* Update the facility's land application management plan to include the manure storage unit.
- 2) *WPDES Permit Sampling.* Sample mixed wastes per WPDES permit requirements.
- 3) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 4) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 5) *Log Report.* Maintain a daily disposal log (see Appendix F).

- 6) *Annual Report.* Submit the 3400-055 “Annual Land Application” report. This report is due January 31, following the year that mixed waste (manure + industrial sludge) was spread from the storage unit.
- 7) *Additional Non-Farm Waste.* Verify with manure storage unit owner that only authorized waste sources are mixed into the manure storage unit.

Note: The industrial sludge generator notifies the department if additional waste sources are identified.

- 8) *Maintenance.* Regularly inspect and maintain the storage unit per ch. NR 213, Wis. Adm. Code requirements.

Note: The manure storage unit owner may be required to follow other regulations and/or implement a NRCS 590 NMP.

7.2 Permitted Farms with Total Industrial Sludge <30% Total Volume

There is not a codified exemption to ch. NR 214, Wis. Adm. Code for discharging <10% total volume industrial sludge into manure storage units. However, the requirements of ch. NR 214, Wis. Adm. Code are typically less stringent than the requirements of ch. NR 243, Wis. Adm. Code. Pursuant to s. NR 243.18, Wis. Adm. Code, mixed waste (manure + agricultural process wastewater + industrial sludge) shall be stored and land applied in accordance with ch. NR 243, Wis. Adm. Code.

A WPDES permitted industrial sludge generator with an approved landspreading outfall may dispose of its sludge at any WPDES permitted facility (including WPDES permitted farms) without a WPDES permit modification, provided the accepting facility’s WPDES permit allows the acceptance of the waste, and the total mixing of industrial sludge is less than 30% total volume and all other applicable permit requirements are met.

Mixed waste may be required to meet chs. NR 213 and NR 214, Wis. Adm. Code. Once the Department approves the disposal of industrial sludge into the WPDES permitted farm storage unit, the mixed waste in the storage unit and the landspreading of the mixed waste must be covered under the farm’s WPDES permit. A farm’s WPDES permit typically contains standards for mixed wastes in ss. NR 243.17 through NR 243.18, Wis. Adm. Code. In any case, the Runoff Management specialist verifies the permitted farm is in compliance with its WPDES permit and NMP prior to acceptance of industrial sludge into the manure storage unit.

Note: The characteristics of the mixed waste significantly change when the industrial sludge intake exceeds 30% total volume. In these cases, a WPDES permit modification may be necessary to include additional provisions of chs. NR 213 and NR 214, Wis. Adm. Code.

For mixing of industrial sludge at <30% total volume of the manure storage unit, requirements of NRCS Standard 590 and ch. NR 243, Wis. Adm. Code may be more stringent, and may be used in

lieu of several requirements as required by chs. NR 213 and 214, Wis. Adm. Code. Several examples are provided below.

Nutrient Management Plan Example: A NMP per s. NR 243.14, Wis. Adm. Code requires similar vertical and horizontal setbacks to restrictive features as well as an agronomic nitrogen limitation. In addition, s. NR 243.14, Wis. Adm. Code contains more stringent limits such as phosphorus application limitations. Land application fields must be registered under the NMP; this is comparable to Department review of ch. NR 214, Wis. Adm. Code land application fields.

Manure Storage Unit Evaluation Example: Section NR 243.16, Wis. Adm. Code requires evaluation (by a qualified individual such as a professional engineer) of any manure storage unit. This evaluation is similar to ch. NR 213, Wis. Adm. Code plans and specification review of industrial waste storage units.

Combined Waste Example: Under s. NR 243.18, Wis. Adm. Code, requires combined waste (manure + process wastewater + other waste not generated by farm operation) to be stored and land applied in accordance with ch. NR 243, Wis. Adm. Code. In other words, once the Department approves the disposal of industrial sludge into the CAFO storage structure, the storage and landspreading of the mixed waste must be covered under the CAFO permit. Section NR 243.18, Wis. Adm. Code allows the department to apply additional requirements such as the requirements in chs. NR 110, 113, 204, 213, and/or NR 214, Wis. Adm. Code to the land application of combined wastes and to the design of structures or systems associated with the combined wastes. This is determined on a case-by-case basis by department staff.

A. Wastewater Program—Internal Review Process.

For new manure storage unit requests, Wastewater staff notifies the assigned department Runoff Management specialist of the request, and initially reviews the request package. This review may be completed by either a Wastewater specialist or Wastewater engineer. Once the review is complete, comments are sent to the Runoff Management specialist. The Runoff Management specialist is responsible for formally approving/denying the request (see below). The Wastewater specialist/engineer then enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer.

In subsequent years, the assigned department regulator reviews the waste generator’s 3400-052 (“Other Methods of Disposal or Distribution”) report. The Wastewater regulator notifies the Runoff Management specialist of any complaints regarding the storage unit. Information about this unit is provided to internal and external entities upon request. The Runoff Management specialist is responsible for any land application complaints regarding the CAFO’s manure storage unit.

B. Runoff Management Program—Internal Review Process.

1. *New requests for manure storage units.* For new manure storage unit requests, the assigned Runoff Management specialist coordinates with Wastewater staff to review the storage request package. Once the review is complete, the Runoff Management specialist sends an approval or

denial letter to the sludge generator (see Appendix K). The Runoff Management specialist also reviews the updated NMP and 180-day storage calculation submitted by the CAFO that accounts for the new waste source added to the manure storage unit.

Considerations for approval include, but are not limited to, the following:

- 1) CAFO's current and past compliance status regarding manure and process wastewater management,
- 2) CAFO's verification to maintain both a minimum of 180 days of storage capacity and adequate land base to support acceptance of off-site wastes, and
- 3) CAFO's use of alternative treatment systems prior to disposal of off-site wastes into manure storage units (i.e. digester).

In subsequent years, the Runoff Management Specialist evaluates and verifies that industrial sludge storage is $\leq 30\%$. This evaluation likely occurs during the permit reissuance process or annual report review. The Runoff Management specialist responds to complaints (if applicable), and verifies that no unauthorized sources are being mixed into the storage unit.

2. Manure Storage Unit Approval Confirmation. If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Note: The department may allow exemptions from the design standards (example: setback requirements from s. NR 213.08, Wis. Adm. Code) and material requirements described in

ch. NR 213, Wis. Adm. Code if the owner or operator can demonstrate that such design standards and material requirements are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and chs. 160 and 283, Wis. Stats. See s. NR 213.06(1), Wis. Adm. Code.

Department staff reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Wastewater specialist/engineer sends an approval confirmation or denial letter to the industrial sludge generator (see Appendix K). A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer

C. Industrial Sludge Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the industrial sludge generator include:

- 1) *Land Application Management Plan.* Update the facility’s land application management plan to include the manure storage unit.
- 2) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations.* Verify $\leq 30\%$ of total contents of manure storage unit are industrial sludge (see Appendix G),
- 6) *Annual Report.* Submit the 3400-052 “Other Methods of Disposal or Distribution” report. This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
- 7) *Manure Storage Unit Integrity Check.* Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial sludge generators must cease use of the manure storage structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 8) *Application from Manure Storage Unit.* Verify that the CAFO is land applying the mixed waste (manure + industrial sludge) in accordance with accepted agricultural practices (NMP) and does not cause detrimental impacts to waters of the state or public health.

D. Permitted Farm Responsibilities (Post Manure Storage Unit Approval)

The CAFO is required to update their NMP to account for the increased waste volume and update the farm’s 180-day manure storage calculation spreadsheet (refer to Appendix C). The department recommends that the CAFO periodically request analytical results and disposal logs from waste generator as well as verify that $< 30\%$ of the total volume of the storage unit is industrial sludge. The CAFO should regularly inspect and maintain the storage unit. The mixed waste (manure +

industrial sludge) in the storage structure and the land application of the mixed waste must be covered under the CAFO's WPDES permit.

Note: CAFOs may accept industrial sludge from multiple sources, provided the total volume is $\leq 30\%$ total volume. The CAFO must keep accurate records of the volume of offsite wastes taken. Each source must be separately approved.

7.3 Permitted Farms with Total Industrial Sludge >30% Total Volume

There is not a codified exemption to ch. NR 214, Wis. Adm. Code for discharging <10% total volume industrial sludge into manure storage units. A WPDES permitted industrial sludge generator with an approved landspreading outfall may dispose of its sludge at any WPDES permitted facility (including WPDES permitted farms) provided the accepting facility's WPDES permit allows the acceptance of the sludge.

Contributions of significant volume (>30% total volume) of industrial sludge into a manure storage unit will likely impact the characteristics of the mixed waste. Requirements pursuant to chs. NR 213, NR 214, and NR 243, Wis. Adm. Code, must be included in the farm's WPDES permit. In these cases, a WPDES permit modification is necessary. The WPDES permit is reviewed for compliance prior to acceptance of industrial sludge into the manure storage unit.

In addition to all ch. NR 243, Wis. Adm. Code requirements, the WPDES permitted farm is required to meet all ch. NR 214, Wis. Adm. Code landspreading requirements including site location criteria (s. NR 214.18(2), Wis. Adm. Code), vehicle and storage criteria (s. NR 214.18(3), Wis. Adm. Code), discharge limitations (s. NR 214.18(4), Wis. Adm. Code), monitoring (s. NR 214.18(5), Wis. Adm. Code), and operation requirements (s. NR 214.18(6), Wis. Adm. Code). Fields are approved and inventoried by the department.

Additional monitoring and limitation may be warranted for potential pollutants present in mixed waste (manure + industrial sludge) outfall per ss. NR 214.18(5) and NR 243.18, Wis. Adm. Code. Chloride monitoring is likely, given the significant chloride concentration typically present in most industrial sludge. Wastewater and Runoff Management staff should also reference Appendix B to determine if any other potential pollutants warrant sampling in the mixed waste.

The requirements of the NRCS 590 Standard and ch. NR 243, Wis. Adm. Code may be more stringent than chs. NR 213 and 214 for mixing industrial sludge at >30% total volume. The WPDES permit may include these more stringent requirements in lieu of several requirements of chs. NR 213 and 214, Wis. Adm. Code.

A. Wastewater Program—Internal Review Process.

For new manure storage unit requests, Wastewater staff notifies the assigned department Runoff Management specialist of the request, and initially reviews the request package. This review may be completed by either a Wastewater specialist or Wastewater engineer. Once the review is complete, comments are sent to the Runoff Management Specialist. The Runoff Management specialist is responsible for formally approving/denying the request. If approved, the Wastewater

specialist/engineer enters the manure storage unit information into the SWAMP “Site” tab and the LAG “Storage Structure” layer. The Wastewater regulator may need to assist the Runoff Management specialist with incorporating relevant ch. NR 214, Wis. Adm. Code requirements during permit drafting or permit modification.

The assigned Wastewater regulator reviews the waste generator’s 3400-052 (“Other Method of Disposal”) report annually. The Wastewater regulator notifies the Runoff Management Specialist on any complaints received regarding the storage unit. Information regarding this unit is provided to internal and external entities upon request.

Fields must be approved in SWAMP, and cataloged in the LAG “Permitted Fields” layer.

B. Runoff Management Program—Internal Review Process.

1. *New requests for manure storage units.* For new manure storage unit requests, the assigned Runoff Management specialist coordinates with Wastewater staff to review the site request package. Once the review is complete, the Runoff Management specialist sends an approval or denial letter to the sludge generator and CAFO authorized representative.

Note: These procedural instructions do not include a template letter for approving >30% total volume mixing of industrial sludge into manure storage units.

If approved, the Runoff Management specialist modifies the WPDES permit to include ch. NR 214, Wis. Adm. Code requirements and public notice the updated permit. The Runoff Management specialist also reviews the updated NMP and 180-day storage calculation submitted by the CAFO that accounts for the new waste source added to the manure storage unit.

Considerations for approval include, but are not limited to, the following:

- 1) CAFO’s current and past compliance status regarding manure and process wastewater management,
- 2) CAFO’s verification to maintain both a minimum of 180-days of storage capacity and adequate land base to support acceptance of off-site wastes, and
- 3) CAFO’s use of alternative treatment systems prior to disposal of off-site wastes into manure storage units (i.e. digester).

The Runoff Management specialist evaluates and verifies the industrial sludge storage volume. This evaluation likely occurs during the permit reissuance or annual report review. The Runoff Management specialist responds to complaints (if applicable) and verifies that only authorized sources are being mixed into the storage unit.

2. *Manure Storage Unit Approval Confirmation.* If documentation for previously approved manure storage units is not already available to the department at the time of WPDES permit reissuance, then department may request appropriate documentation for these manure storage units. In these cases, the WPDES permit drafter may include a compliance schedule (Appendix E) in the WPDES permit for submitting these items. In accordance with this compliance schedule, the industrial liquid waste generator resubmits a storage request package (as outlined in Section 5.0) for each manure storage unit.

Note: It is not the department's intention to require an assessment of each manure storage unit during each WPDES permit term. If issues are identified with specific manure storage units, then reassessment may be required during the subsequent permit term.

Note: The department's permit drafter should verify that the WPDES permit includes the standard manure storage unit ("pit") exemption language in the "Land Application" section of the draft WPDES permit.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

Department staff reviews the information provided by the industrial liquid waste generator. Once the review is complete, the Wastewater specialist/engineer sends an approval confirmation or denial letter to the industrial liquid waste generator. A copy of this letter is transmitted to the regional department non-point source coordinator and the county land conservationist. The Wastewater specialist/engineer enters the manure storage unit information into the SWAMP "Site" tab and the LAG "Storage Structure" layer

C. Industrial Sludge Generator Responsibilities (Post Manure Storage Unit Approval)

Once approved, requirements for the industrial sludge generator include:

- 1) *Land Application Management Plan.* Update the facility's land application management plan to include the manure storage unit.
- 2) *Analytical Results.* Provide analytical results annually to manure storage unit owner, and retain a copy of the results during the WPDES permit term.
- 3) *Waste Stream Notification.* Notify the manure storage unit owner of any process change (influent addition, change in treatment, etc.) that results in changes to waste stream characteristics.
- 4) *Log Report.* Maintain a daily disposal log (see Appendix F).
- 5) *Percentage Calculations.* Verify $\geq 30\%$ of total contents of manure storage unit are industrial sludge (see Appendix G),
- 6) *Annual Report.* Submit the 3400-052 "Other Methods of Disposal or Distribution" report. This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
- 7) *Manure Storage Unit Integrity Check.* Communicate with manure storage unit owner to verify that the manure storage unit is properly maintained, and still meets applicable design standards. Industrial sludge generators must cease use of the manure storage

- structure if applicable design standards are no longer met. The department recommends that the manure storage unit owner contact a qualified individual to inspect and provide repair recommendations should an issue be identified with the manure storage unit.
- 8) *Application from Manure Storage Unit.* Verify that the CAFO is land applying the mixed waste (manure + industrial sludge) in accordance with accepted agricultural practices (NMP) and does not cause detrimental impacts to waters of the state or public health.

D. Permitted Farm Requirements.

The CAFO requests a WPDES permit modification, unless the current WPDES permit already contains ch. NR 214, Wis. Adm. Code requirements. The CAFO also needs to update their NMP to account for the increased mixed waste volume to be land applied. The NMP includes any additional ch. NR 214, Wis. Adm. Code landspreading requirements that are more stringent than ch. NR 243, Wis. Adm. Code (see Appendix J). The CAFO shall periodically request analytical results and disposal logs from waste generator as well as verify the total volume of industrial sludge mixed into the manure storage unit. Regular inspection and maintenance of the manure storage unit is expected.

Note: CAFOs may accept industrial sludge from multiple sources, provided that the CAFO maintains accurate records of the volume of non-farm wastes received. All sources must receive approval from the department.

8.0 Streamlined Exemption to Mix Industrial Sludge into Manure Storage Units

The department may exempt a land treatment system, including sludge spreading systems, from specific requirements of this chapter if the owner or operator can demonstrate that the requirement is more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and ch. 160, Stats. (reference s. NR 214.06(1), Wis. Adm. Code).

The intent of this procedural instruction section is to detail the streamlined exemption request. This section also outlines the submittal and approval process for sludge generators wanting to mix small volumes of liquid industrial sludge into manure storage units. This particular streamlined exemption request outlines situations and conditions where sludge generators can expect a predictable exemption approval by the department.

IMPORTANT: This streamlined exemption addresses requests by Wisconsin food processors for beneficial sludge reuse. Beneficial reuse will likely reduce discharge costs for sludge generators while ensuring compliance with environmental regulations.

IMPORTANT: If the sludge generator does not agree with the specific conditions and requirements of this streamlined exemption, then the sludge generator may draft and submit an exemption request pursuant to ch. NR 214, Wis. Adm. Code. For a non-streamlined exemption request, the sludge generator may be required to submit additional information, demonstrate non-detrimental impacts and beneficial reuse characteristics, and/or detail specific conditions and requirements that meet exemption criteria.

8.1 Applicability

The proposed streamlined exemption applies only to industrial sludges generated by food processors. The industrial sludge must have a total solids content $\leq 6\%$. The industrial sludge's characteristics must be beneficial, and must not be detrimental to human health or the environment.

The manure storage unit cannot be located on a WPDES permitted farm or approved under a farm's WPDES permit. The sludge generator must verify that the storage unit's construction meets NRCS 313 or ch. NR 213, Wis. Adm. Code requirements.

Note: For more information on verification of manure storage unit construction standards refer to Section 5.0.

Some industrial facilities mix and/or store industrial liquid wastes and industrial sludge together. This exemption may also apply to the mixing of the industrial mixed waste (industrial liquid wastes + industrial sludge) into manure storage units provided:

- 1) All industrial liquid wastes and sludges originate from the same WPDES permitted facility.
- 2) The industrial mixed waste outfall is listed in the facility's current WPDES permit.
- 3) The total volume of the industrial mixed waste must not exceed 10% total volume of the manure storage unit.

Note: Some industrial facilities possess multiple land application outfalls in their WPDES permit. A facility may wish to mix multiple outfalls into the same manure storage unit. With exemption approval, the department may allow the mixing of multiple outfalls from the same WPDES permitted facility into the same manure storage unit provided the cumulative industrial mixed waste does not exceed 10% of the total volume of the manure storage unit.

8.2 Wastes Excluded from Streamlined Exemption

This streamlined exemption excludes, but is not limited to, the following types of waste:

- Industrial sludge $>6\%$ solid (regulated per s. NR 214.18, Wis. Adm. Code),
- Industrial sludge with concentrations of cadmium > 2 mg/kg (dry weight),
- Process grease (regulated per s. NR 214.18, Wis. Adm. Code),
- By-product solids (regulated per s. NR 214.17, Wis. Adm. Code),
- Industrial liquid wastes (regulated per s. NR 214.17, Wis. Adm. Code); Note: Industrial liquid wastes are excluded unless mixed with industrial sludge at the waste generator's facility, and this mixed waste is listed as a combined sample point, or outfall, under the sludge generator's WPDES permit.,

- Other non-domestic wastes (including, but not limited to, catch basins, grit chambers, wastes from non-residential garages, used for storage, maintenance, or washing of motor vehicles, etc.),
- Industrial wastes containing viable pathogens (including, but not limited to, meat or poultry operations),
- Septage (including waste from sanitary grease interceptor; regulated per ch. NR 113, Wis. Adm. Code),
- Sewage sludge (including grit and debris; regulated per ch. NR 204, Wis. Adm. Code),
- Domestic wastewater,
- Wastes commingled by facilities without a WPDES permitted mixed waste outfall,
- WPDES permitted and non-WPDES permitted contract haulers, and
- Any other waste(s) as determined by the department.

Note: Refer to applicable guidance procedural instructions for the mixing of the above wastes into manure storage units.

Note: Solid and hazardous wastes are not included in this template streamlined exemption. These procedural instructions are for the WDNR Wastewater Program. This document does not apply to waste regulated in other department programs.

8.3 Streamlined Exemption Provisions

By meeting the provisions below, the sludge generator demonstrates that the specific requirements of ch. NR 214, Wis. Adm. Code (specifically s. NR 214.18 Wis. Adm. Code) are more stringent than necessary to comply with the provisions of ch. NR 140, Wis. Adm. Code and ch. 160, Stats.

1. The sludge generator is “in compliance” with its WPDES permit. If the WPDES permitted sludge generator is not in compliance with its WPDES permit, the sludge generator must correct all outstanding issues before applying for this streamlined exemption.
2. The industrial sludge originates from food processing wastes, and is not considered hazardous waste per s. NR 660.10, Wis. Adm. Code, toxic, and/or detrimental to human health or environment.
3. The industrial sludge must have beneficial use as a fertilizer, soil conditioner, or soil amendment. The industrial sludge has no detrimental effects on human health or the environment. The sludge generator must provide a representative sludge analysis (see Condition #5 below).
4. The streamlined exemption request covers sludge consisting of $\leq 6\%$ total solids. It is not the intent of this streamlined exemption to include concentrated (high % solid) industrial sludge.

Note: Industrial cake sludge does not qualify for this streamlined exemption.

5. The sludge generator provides a representative analysis of the sludge along with the streamlined exemption request. This analysis may contain additional parameters (compared to the sludge generator’s WPDES permit requirements). The following parameters are needed for the department to evaluate the streamlined exemption request.

- A. Physical parameters
 - 1) Field measurement of pH (su)
 - 2) Laboratory measurement of Total Solids (Percent)
- B. Nutrients (all laboratory measurements)
 - 1) TKN (mg/L)
 - 2) Nitrogen, Ammonia (mg/L)
 - 3) Organic Nitrogen (calculated; mg/L)
 - 4) Nitrates (mg/L)
 - 5) Total Phosphorus (mg/L)
 - 6) Water Extractable Phosphorus (Percent of Total P)
 - 7) Total Potassium (mg/L)
- C. Metals (all laboratory measurements)
 - 1) Lead (mg/kg dry weight)
 - 2) Zinc (mg/kg dry weight)
 - 3) Copper (mg/kg dry weight)
 - 4) Nickel (mg/kg dry weight)
 - 5) Cadmium (mg/kg dry weight)
- D. Other (all laboratory measurements)
 - 1) COD (mg/L; BOD₅ is an acceptable surrogate parameter)
 - 2) Chloride (mg/L)
- E. The department may require additional monitoring on a case-by-case basis.

Note: All laboratory measurements must be conducted by a state certified laboratory using appropriate methods.

Note: Monitoring for PCBs and other industry specific pollutants is not typically warranted under this streamlined exemption. It is the responsibility of the sludge generator to evaluate that the industrial sludge (at a maximum mixing volume of 10% total volume) does not significantly alter the characteristics of the manure within the manure storage unit.

Note: Some industrial sludges may not mix well with manure, or may cause detrimental impacts to the owner's manure storage unit and/or pumping system. It is unlikely that these industrial sludges will be approved under this streamlined exemption. For example, some industrial sludges containing vegetable-based oils may separate from manure when mixed in the manure storage unit.

- 6. Consistent with nutrient management planning provisions of ATCP 50.06, Wis. Adm. Code, the sludge generator provides representative analytical results annually to the manure storage unit owner for the outfall parameters listed in the sludge generator's WPDES permit, so that the manure storage unit owner is aware of the available nutrients and potential pollutants present in the industrial sludge.
- 7. The sludge generator notifies the manure storage unit owner of any process change(s) (influent addition, change in treatment, etc.) that result in changes to industrial sludge characteristics.

8. The sludge generator updates its land application management plan to include the manure storage unit and streamlined exemption approval letter.

Note: Industrial sludges are commonly incorporated per s. NR 214.18(4)(c), Wis. Adm. Code because of odor. The department recognizes that permittees may mix industrial sludge into manure storage units of farmer who practice surface application, whereby the manure/sludge mixture is not incorporated with the soil.

If it is determined that nuisance conditions exist, then the department may request incorporation of the previously spread waste in a timely manner, and/or rescind approval for the manure storage unit.

9. The industrial sludge does not exceed 10% (total volume) of the manure storage unit at the time the manure storage unit's contents are landspread.
10. The sludge generator logs all industrial sludge mixing events into the manure storage unit (see Appendix F).
11. Total volume of industrial sludge mixed into each manure storage unit is reported annually on the sludge generator's 3400-052 ("Other Methods of Disposal or Distribution" report). This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit
12. The sludge generator verifies with manure storage unit owner that only authorized waste sources are mixed into the manure storage unit.

Note: Some industrial facilities possess multiple land application outfalls in their WPDES permit. A facility may wish to mix multiple outfalls into the same manure storage unit. With exemption approval, the department may allow the mixing of multiple outfalls into the same manure storage unit provided the cumulative industrial mixed waste does not exceed 10% of the total volume of the manure storage unit.

13. The department recommends that the owner of the manure storage unit meet ATCP 50, Wis. Adm. Code, and have a current NRCS 590 nutrient management plan.
14. The department recommends that the sludge generator verifies that the farmer is landspreading the mixed waste (manure + industrial sludge or industrial mixed waste) in accordance with accepted agricultural practices (including ATCP 50, Wis. Adm. Code and the NRCS 590 nutrient management plan), and the landspreading does not cause detrimental impacts to waters of the state or public health.

Note: Inappropriate spreading of mixed waste (manure + industrial sludge or industrial mixed waste) may result in stepped enforcement. See Section 9.0 below for more details.

15. The department recommends that older manure storage units (> 10 years past construction date) be visually inspected annually. If issues are noted, the sludge generator must should the manure storage unit owner. The manure storage unit owner should contact a qualified individual to inspect and provide repair recommendations. Any issues identified should be reported to the department within 30 days.

8.4 Submittal Process for Streamlined Exemption

The sludge generator's submittal package for the streamlined exemption must include:

- Storage request package (see Section 5.0)
- Current copy of the approved NRCS 590 nutrient management plan (if applicable); and
- Written request for this streamlined exemption from the authorized representative of the sludge generator.

Note: Pursuant to county regulations, the manure storage unit owner may be asked to update their NRCS 590 nutrient management plan after approval of this streamlined exemption. A copy of this updated plan does not need to be submitted to the department.

8.5 Department Review and Approval Process for Streamlined Exemption

The assigned Wastewater regulator will review the submitted request package (see Section 5.0) as well as the exemption request. Upon approval, the Wastewater regulator will send a written letter to the WPDES permitted facility (see template letter in "Appendix L").

The department may deny this streamlined exemption for several reasons, including but not limited to the following:

- Sludge generator is in noncompliance with its WPDES permit;
- Insufficient design and/or storage capacity criteria for manure storage unit;
- Farmer non-compliance (improper maintenance, landspreading, etc.);
- Incomplete request package;
- Detrimental and/or non-beneficial industrial sludge characteristics; and
- County disapproval of sludge mixing into manure storage unit.

8.6 Sludge Generator Compliance Expectations

Upon approval of this streamlined exemption, the WPDES permitted sludge generator agrees to update its land application management plan to include the approval letter and streamlined exemption request provisions. This management plan must include a list and approval letter(s) of all approved manure storage units accepting industrial sludge or mixed industrial wastes. This updated management plan must be submitted to the department within 30 days of approval of the manure storage unit and streamlined exemption.

9.0 Enforcement Recommendations

The Department reserves the right to rescind manure storage unit approvals at any time if the department identifies violations according to chs. 281 and 283 Wis. Stats, chs. NR 213 and NR 214, Wis. Adm. Code, WPDES permit, and/or the industrial sludge exemptions are violated. If it

is determined that there is a violation (as listed above), the sludge generator must immediately cease mixing into the manure storage unit.

The department may implement standard stepped enforcement procedures including, but not limited to, rescinding approval of specific manure storage unit(s) and/or the streamlined exemption. The Department may allow the sludge generator to resume mixing to the manure storage unit after compliance issues have been resolved.

Appendices

10.1 Appendix A. Form 3400-196 Notice of Intent to Store Industrial Wastes in Existing Off-Site Manure Storage Structures [last revised 7/2010]. *Note: This form will be subject to periodic review and revision.*

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

**Notice of Intent to Store Industrial Wastes
in Existing Off-Site Manure Structures**
Form 3400-196 (7/10)

Notice: Collection of this information is authorized under s. 283.55, Wis. Stats., and Chapter NR 214, Wis. Adm. Code. Failure to provide this information may result in penalties. Personally identifiable information collected will be used for program administration and other governmental programs and may be provided to requesters as required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.].

Wastewater Generator Information

Legal Name of Operation			WPDES Permit No.		
Address - Street, Route or Box		City	State	ZIP Code	
Amount of waste to be directed to storage facility: Maximum Month: _____ gallons			Annually: _____ gallons		

Location of Storage Structure

Farm Name			County	Township	
Address - Street, Route or Box		City	State	ZIP Code	
Quarter/Quarter	Quarter	Section	Town Number	Range Number <input type="checkbox"/> E <input type="checkbox"/> W	County Parcel No. or Computer Number

Storage Structure Design

Storage Type:
 Glass lined Clay Concrete Geomembrane Geosynthetic Clay Other (describe) _____

IMPORTANT: Attach documentation by a professional engineer or other qualified individual that design and construction of the structure meets NRCS Standard 313 or NR 213, Wis. Adm. Code, requirements.

Construction Date: _____ Storage Capacity: _____ gallons

Is the proposed storage structure currently being used for storing manure? Yes No

If no, when was the last date manure was stored in the structure? _____

If yes,

- How many days of storage are provided by the structure without addition of liquid industrial wastes? _____ days
- How many days of storage are provided by the structure with addition of liquid industrial wastes? _____ days
- Does the amount of industrial waste to be stored exceed 10% of the materials stored in the storage structure? Yes No

If yes, submit documentation by a professional engineer or other qualified individual that design and construction of the structure complies with the requirements of NR 213, Wis. Adm. Code.

Generator Certification

I certify that I am familiar with the information contained in this notice and that to the best of my knowledge and belief such information is true, complete and accurate.

Printed or Typed Name of Official Representative		Title
Signature of Official Representative		Date Signed

Land Application and Farmer/Producer Certification

Does the farmer/producer have a current nutrient management plan? Yes No

I and/or my agronomist have been provided with a waste analysis of the proposed waste. I certify that the proposed waste will be factored into my nutrient management plan or other land application practices.

Printed or Typed Name of Farmer/Producer	Signature of Farmer/Producer	Date Signed
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County Land Conservation Department Notification

The wastewater generator has discussed with appropriate County Land Conservation Department staff the proposed use of the manure storage facility for storage of industrial waste. The County has determined that its resource management issues relating to storage and land spreading of these industrial wastes have been addressed and that storage of industrial waste is consistent with cost-share agreement conditions that may apply to the facility.

Printed or Typed Name of Official County Representative		Title
Signature of Official County Representative		Date Signed

The WPDES permittee shall submit this completed form along with the request for approval to discharge wastes to the manure storage structure to its DNR Regional contact.

10.2 Appendix B. Representative Sampling of Industrial Waste(s) from Waste Generator.

A representative composite sample shall be collected from the waste generator. Analysis results shall be provided on a dry weight basis.

Lab analyses (from a certified or registered laboratory) shall be performed to characterize the chemical composition of the wastewater. An analysis shall be performed for the following parameters: COD, pH, TKN, organic nitrogen, total phosphorus, chloride, and potassium. Sampling for arsenic, cadmium, copper, fecal coliform, lead, mercury, molybdenum, nickel, selenium, zinc, as well as parameters from Table 1 may also be required if the waste is believed to contain these substances.

Note: Sections NR 214.17(5) and NR 214.18(5), Wis. Adm. Code outline the sampling requirements for industrial liquid wastes and industrial sludges, respectively.

In addition, if any material is received from a primary industry listed in Table 2, the results of a pollutant scan of that waste material for the applicable pollutant group (shown in Table 2) shall be submitted.

Asbestos	Dimethyl amine	Nitrotoluene
Acetaldehyde	Dinitrobenzene	Parathion
Allyl alcohol	Diquat	Phenolsulfonate
Allyl chloride	Disulfoton	Phosgene
Amyl acetate	Diuron	Propargite
Aniline	Epichlorohydrin	Propylene oxide
Benzonitrile	Ethion	Pyrethrins
Benzyl chloride	Ethylene diamine	Quinoline
Butyl acetate	Ethylene dibromide	Resorcinol
Butylamine	Formaldehyde	Strontium
Captan	Furfural	Strychnine
Carbaryl	Guthion	Styrene
Carbofuran	Isoprene	2,4,5-T (2,4,5-Trichloro- phenoxy acetic acid)
Carbon disulfide	Isopropanolamine	TDE (Tetrachloro- Diphenylethane)
Chlorpyrifos	Dodecylbenzenesulfonate	2,4,5-TP [2-(2,4,5-Trichloro- phenoxy) propanoic acid]
Coumaphos	Kelthane	Trichlorofan
Cresol	Kepone	Triethanolamine dodecyl- Benzenesulfonate
Crotonaldehyde	Malathion	Triethylamine
Cyclohexane	Mercaptodimethur	Trimethylamine
2,4-D (2,4-Dichlorophenoxy acetic acid)	Methoxychlor	Uranium
Diazinon	Methyl mercaptan	Vanadium
Dicamba	Methyl methacrylate	Vinyl acetate
Dichlobenil	Methyl parathion	Xylene
Dichlone	Mevinphos	Xylenol
2,2-Dichloropropionic acid	Mexacarbate	Zirconium
Dichlorvos	Monoethyl amine	
Diethyl amine	Monomethyl amine	
	Naled	
	Napthenic acid	

TABLE 2
PRIMARY INDUSTRIES AND POLLUTANT GROUPS REQUIRING TESTING

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
Adhesives and sealants	X	X	X		
Aluminum forming	X	X	X		
Auto and other laundries	X	X	X	X	
Battery manufacturing	X		X		
Coal mining	X	X	X	X	
Coil coating	X	X	X		
Copper forming	X	X	X		
Electric and electronic compounds	X	X	X	X	
Electroplating	X	X	X		
Explosives manufacturing	X	X	X		
Foundries	X	X	X		
Gum and wood chemicals					
All subparts except D and F	X	X			
Subpart D	X	X	X		
Subpart F	X	X	X		
Inorganic chemicals manufacturing	X	X	X		
Iron and steel manufacturing	X	X	X		
Leather tanning and finishing	X	X	X		X
Mechanical products manufacturing	X	X	X		
Nonferrous metals manufacturing	X	X	X	X	
Ore mining (applies to Subpart B)		X			
Organic chemicals manufacturing	X	X	X	X	X
Paint and ink forming	X	X	X		
Pesticides	X	X	X	X	
Petroleum refining	X				X
Pharmaceutical preparations	X	X	X		
Photographic equipment and supplies	X	X	X		
Plastic and synthetic materials manufacturing	X	X	X	X	
Plastic processing	X				
Porcelain enameling					
Printing and publishing	X	X	X	X	
Pulp, paper and paperboard mills					

Subpart A - Dissolving Kraft	X	X			X
Subpart B - Bleached Papergrade Kraft and Soda	X	X			X
Subpart C - Unbleached Kraft		X		X	X
Subpart D - Dissolving Sulfite	X	X			X
Subpart E - Papergrade Sulfite	X	X	X		X
Subpart F - Semi-chemical		X			X
Subpart G - Mechanical Pulp	X	X			X
Subpart H - Non-Wood Chemical Pulp	?	?	?	?	X
Subpart I - Secondary Fiber Deink	X	X		X	X
Subpart J - Secondary Fiber Non-Deink	X	X		X	X
Subpart K - Fine and Lightweight Papers from Purchased Pulp					
Nonintegrated Fine		X			X
Nonintegrated Lightweight	X	X		X	X
Subpart L - Tissue, Filter, Non-Woven and Paperboard from Purchased Pulp	X	X		X	X
Rubber processing	X	X	X		
Soap and detergent manufacturing	X	X	X		
Steam electric power plants	X	X			
Textile mills (excluding Subpart C)	X	X	X		
Timber products processing	X	X	X	X	

10.3 Appendix C. Verification of CAFO 180 Day Storage (Worksheet). This worksheet includes all wastes mixed into the manure storage unit including, but not limited to manure, leachate, collected stormwater, and industrial wastes (industrial liquid wastewater and industrial sludge). *Note: Counties many utilize similar worksheets that may be different then the department's example provided below.*

Liquid Waste Storage Volume Calculation Worksheet							
		Client:	Dsn by:	Date:	03/22/2016		
Total Annual Liquid Waste Generation		Total Liquid Waste Storage Capacity (gallons)					
Liquids Collected/Stored	Annual Gallons	Waste Storage	Total Vol. from Settled Top to Bottom	-Solids Storage	-25-yr, 24-hr Precip. on Storage	-Freeboard Vol.	Max. Operating Level (MOL) Vol.
Manure and Bedding		#1					0
Parlor Wastewater		#2					0
Feed Storage Leachate		#3					0
Feed Storage Runoff Collected *		#4					0
Feedlot Runoff		#5					0
Net Precipitation on Storage Surface(s) **		#6					0
Offsite Wastes						Total MOL Vol:	0
Other						Days of Storage:	#DIV/0!
Other						Meets Days of Storage Criteria:	#DIV/0!
Other							
Other							
Other							
TOTAL:	0						

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* Feed storage runoff volume can be calculated in the NRCS "Feed Storage Area Runoff - Treatment" spreadsheet, Tab 5.

** Net annual precipitation on storage depth can be calculated in the NRCS "Waste Storage Design" spreadsheet and then multiplied by the storage top area to get the net annual precipitation volume.

NOTE 1: Formula for days of storage: (Total Storage Capacity/Annual Liquid Waste Generation)*365 = Days of storage

NOTE 2: The NRCS "Waste Storage Design" spreadsheet can be used to calculate the days of storage as well. Feed storage leachate and feed storage collected runoff volumes should be added to the average daily wastewater volume in cell D17, Tab 1 since there is no separate location to enter this. The storage sizing calculations work only for rectangular and circular storages. Calculations for net precipitation volumes are month specific and more precise than the average annual volume shown above.

NOTE 3: The NRCS "Waste Storage Design" and "Feed Storage Area Runoff - Treatment" spreadsheets may be downloaded from the Wisconsin NRCS Engineering Resources website:
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/wi/technical/engineering/?cid=nrcs142p2_025422

10.4 Appendix D. “10% Exemption” Approval Letter (Template) for the Mixing of Industrial Liquid Wastes into a Manure Storage Unit.

[Enter Date]

[Enter Authorized Representative Name]

[Enter Title]

[Enter Facility Name]

[Enter Mailing Address]

[City, State, Zip Code]

RE: Approval to mix industrial liquid waste into [enter manure storage name] under [enter waste generator facility name] (WPDES permit # [enter WPDES permit #])

Dear [Enter name],

Thank you for submitting a request to store industrial liquid waste in the [enter manure storage unit] located at [enter legal description or address of manure storage unit]. The Department of Natural Resources (department) has reviewed and approved this request, provided the following provisions are met.

1. [Enter facility name] will update the facility’s land application management plan to include this manure storage unit. This document will be submitted to the department within 30 days of receipt of this letter.
2. [Enter facility name] will provide representative analytical results of industrial liquid waste to owner of the manure storage unit annually. In addition, the manure storage unit owner will be notified of any changes in process that may result in changes to waste stream characteristics or pollutants.
3. [Enter facility name] will maintain a daily disposal log for all industrial liquid waste mixed into this manure storage unit. An example daily log is attached with this letter (*Enter Attachment #*).
4. Industrial liquid wastes must be less than 10% of the total volume of the manure storage unit. Note: “Total volume” is defined as the gallons of manure held in the storage unit just prior to land application.
5. Total volume mixed to this manure storage unit will be reported on the 3400-052 (“Other Methods of Disposal or Distribution” report). This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
6. [Enter facility name] will periodically communicate with the manure storage owner to verify that no additional waste sources (industrial wastes, biosolids, septage, etc.) are being mixed

into this manure storage unit. *[Enter facility name]* will notify the department if it is determined that other non-farm wastes are being mixed in the manure storage unit.

If you have any questions regarding this approval letter, please call me at *[enter phone number]* or email me at *[enter email address]*. Thank you for your attention to this matter.

Sincerely,

[Enter Signature Block]

- cc. Permit file
- ec. *[Enter Supervisor Name]*, WDNR Watershed Field Supervisor, *[Enter Email]*
[Enter DNR Regional Non-Point Source Coordinator] WDNR Non-Point Source
Coordinator, *[Enter Email]*
[Enter County Contact, Title, Email]

Attachments: *[Example daily disposal log, Industrial liquid waste calculation worksheet, etc.]*

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats, you have 30 days after the decision is mailed, or otherwise served by the department, to file your petition with the appropriate circuit court and serve the petition on the department. Such a petition for judicial review must name the department of natural resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to serve a petition of hearing on the Secretary of the department of natural resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

10.5 Appendix E. Compliance Schedule Language for Approval Confirmation of Manure Storage Units. *Note: This language must be included in the industrial waste generator's WPDES permit.*

Approval Confirmation of Existing Manure Storage Units: Evaluate each existing manure storage unit that stores industrial wastes. Submit the following documents:

1. Form 3400-0196 ("Notice of Intent to Store Industrial Wastes in Existing Off-Site Manure Structures"),
2. Documentation from a professional engineer (or qualified equivalent) indicating that construction of the structure complies with the requirements from ch. NR 213, Wis. Adm. Code,
3. Storage unit identification (unit location relative to other onsite units),
4. General liquid waste description and characterization,
5. Identification of any chemicals present in the industrial waste, and
6. Verification of all waste sources for manure storage unit.

Proposed Compliance Schedule Due Date: 2 years after permit reissuance.

Note: Depending on the number of manure storage units that the industrial waste generator is required to assess, the department may consider a compliance schedule up to 4 years after permit reissuance.

Note: The department's permit drafter may choose to include information regarding manure storage unit confirmation in the waste generator's draft "Fact Sheet." Rationale for this compliance schedule could include, but is not limited to the following:

- *The department lacks information on the waste generator's manure storage unit(s);*
- *There have been identified compliance issues for the waste generator's manure storage unit(s);*
- *There is concern from public regarding the use, maintenance, and/or land application of mixed wastes (industrial waste + manure) from manure storage unit; and/or*
- *Other reasons on a case-by-case basis.*

10.6 Appendix F. Template Daily Disposal Log for Industrial Liquid Wastes into Manure Storage Unit).

Facility Name:		Outfall Number:	
Month/Year:		Description of Waste:	
Date	Time AM/PM	Manure Storage Unit Name / Location	Total Volume (gpd) Industrial Waste
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
		Total Monthly Volume:	

10.7 Appendix G. Calculation Worksheet for Determining Maximum Allowable Industrial Waste Volume into a Manure Storage Unit.

DETERMINING INDUSTRIAL WASTE VOLUME IN MANURE STORAGE UNITS

Manure Storage Unit

1) Volume of Manure Storage Unit: _____ gallons

Note: The volume of manure storage is not the total volume of the storage unit but rather the volume up to the maximum operating level (MOL).

2) Typical Number of Times Emptied Each Year: _____/year

3) Decimal Percent Full when Emptied: _____

Example: If the storage unit is emptied when it's 75% full the decimal percent would be 0.75.

4) Annual Maximum Allowable Industrial Waste Volume: _____ gallons

-- (Line 1 * Line 2 * Line 3 * 0.10)

Note: Line 4 calculates volume based on NR 214.17(1) Wis. Adm. Code exemption. To calculate max industrial wastewater volume <30% total volume substitute 0.30 for 0.10)

5) Max. Industrial Waste Volume Between Hauling Events: _____ gallons

-- (Line 4 / Line 2)

OR

Nutrient Management Plan (NMP) Records

6) Annual Manure Applied based on NMP: _____ gallons

Note: It is recommended that the manure estimate be an average of the last three years records. For a new/proposed farm, the department will accept an estimate for annual manure generation.

7) Typical Number of Hauling Events Each Year: _____/year

8) Annual Max. Industrial Waste Volume: _____ gallons

-- (Line 6 * 0.10)

9) Max. Industrial Liquid Volume between Hauling Events: _____ gallons

-- (Line 8 / Line 7)

10.8 Appendix H. Plan/Specification Approval Template for Storing >10% Industrial Liquid Waste or Any Volume Industrial Sludge into a Manure Storage Unit. *Note: The department requires minimum standards for the approval of existing manure storage unit. These standards are referenced under ch. NR 213, Wis. Adm. Code, related guidance documents, and department policy.*

DATE

Project Number: S-YEAR-####

AUTHORIZED REPRESENTATIVE NAME
TITLE
COMPANY
ADDRESS
CITY, STATE ZIP
VIA EMAIL: EMAIL ADDRESS

Subject: Industrial Wastewater Facility Plan and Specification Letter of No Objection

Dear NAME:

The Department of Natural Resources (hereafter Department) does not object to the design and construction of the manure storage unit proposed to store industrial waste mixed with manure, subject to the conditions listed below. The Department received a complete plan and specification submittal on DATE under the seal of PLAN PREPARER, Professional Engineer, COMPANY. Pursuant to s. NR 108.04(5), Wis. Adm. Code the Department may not approve plans and specifications for any project for which construction has commenced.

DESCRIPTION OF MANURE STORAGE UNIT. The manure storage unit meets the requirements of ch. NR 213, Wis. Adm. Code.

The Department does not object to the manure storage unit plans and specifications, subject to the following conditions:

1. That the WPDES permit be modified to include the manure storage unit.
2. That the manure storage unit not be used for industrial waste until the permit modification is completed.

The Department reserves the right to order changes or additions should conditions arise making this necessary.

REVIEW ENGINEER NAME

Wastewater Engineer
Water Quality Bureau

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
FOR THE SECRETARY

WASTEWATER SECTION CHIEF NAME
Wastewater Section Chief
Water Quality Bureau

cc: DNR REGULATOR (via email)
DNR PERMIT DRAFTER (via email)
DNR REGIONAL NON-POINT SOURCE COORDINATOR (via email)
COUNTY LAND CONSERVATIONIST (via email)
PLAN PREPARER (via email)
Permit File (WPDES Permit No. WI-_____-__-_)
Plan File

10.9 Appendix I. Approval Letter (Template) for Mixing of Industrial Liquid Wastes into CAFO Manure Storage Unit (Industrial Liquid Wastes <30% Total Volume). *Note: This is an example approval letter from the Runoff Management Program and may be modified without notification.*

[Enter Date]

[Enter CAFO Contact Information]

SUBJECT: Nutrient Management Plan (NMP) Non-Substantial Revision Approval, Acceptance of Offsite Waste Less than 30%, [Farm Name], WPDES Permit No. [Permit #]

Dear Mr./Ms./Messrs. [Enter Last Name]:

On [Date Received] the department received a NMP non-substantial revision request from [Farm Name] to accept [Waste Type] from [Waste Generator Name] into [Manure Storage Name]. After completing our review of [Farm Name's] NMP revision request to add off site industrial liquid waste to the farm's manure lagoon the Wisconsin Department of Natural Resources (department) is providing conditional approval that is consistent with ch. NR 243 Wis. Adm. Code. A revision to the NMP to accept low volumes of industrial wastewater (less than 30%) is considered a non-substantial revision to the NMP. The NMP non-substantial revision request was submitted by [Applicant Name, Applicant Company], and received by the department on [Date Received].

By approving this request, the department has determined that:

1. [Farm Name] will be able to maintain at least 180-days of storage for liquid manure and process wastewater with the addition of the industrial liquid waste.
2. [Farm Name] has an adequate land base to account for the increased volume of waste.
3. The industrial liquid waste meets the criteria under s. NR 214.02(1), Wis. Adm. Code.
4. [Farm Name] is not accepting other offsite wastes into [Manure Storage Name].

The department hereby approves the [Date Received] NMP non-substantial revision request to modify [Farm Name's] NMP subject to the following conditions:

1. [Waste Type] will only be mixed into [Manure Storage Name].
2. At any given time, the percent of [Waste Type] in [Manure Storage Name] will not exceed [Enter xx%].
3. FOR HIGH CHLORIDE STRENGTH WASTE (OPTIONAL): Manure samples collected for nutrient analysis from [Manure Storage Name] shall also be analyzed for chlorides.
4. FOR HIGH CHLORIDE STRENGTH WASTE (OPTIONAL): The total pounds of chloride applied will be limited to 170 pounds per year or 340 pounds per acre per 2 year period (reference ch. NR 214 Wis. Adm. Code). Note: This limit must be identified in the updated NMP.

5. Analytical results of [*Waste Type*] and copies of the daily disposal log for all [*Waste Type*] mixed into [*Manure Storage Name*] will be submitted annually with the NMP Update.
6. If [*Farm Name*] is notified by the industrial liquid waste generator that there has been a change in the waste stream process that would result in a change to the waste characteristics, [*Farm Name*] will notify the department of the change within 7 days.
7. INSTANCES REQUIRING NR 214 REQUIREMENTS (OPTIONAL): On a case-by-case basis other requirements in ch. NR 214, specifically s. NR 214.17(2) through (7), may be added if deemed necessary. Note: The additional requirements must be identified in the updated NMP.

This conditional approval does not limit the department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with ch. NR 243, Wis. Adm. Code and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at [*Enter Phone Number or Email Address*].

Sincerely,

[*Enter Signature Block*]

cc: [*Enter Supervisor Name*], WDNR Watershed Field Supervisor, [*Enter Email*]
[*Enter Name*], WDNR Runoff Management Section Chief
[*Enter Name*], WDNR Nutrient Management Program Coordinator
[*Enter Specialist Name*], WDNR Wastewater Specialist, [*Enter Email*]
[*Enter County Contact, Title, Email*]
[*Enter Crop Consultant, CCA, Company Name, Email*]
File

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats, you have 30 days after the decision is mailed, or otherwise served by the department, to file your petition with the appropriate circuit court and serve the petition on the department. Such a petition for judicial review must name the department of natural resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to serve a petition of hearing on the Secretary of the department of natural resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

10.10 Appendix J. Land Application Requirements for CAFOs Accepting >30% Industrial Wastes into Permitted Manure Storage Units.

The tables and information provided in this document contain a combination of the requirements under s. NR 214.17, s. NR 214.18, and/or ch. NR 243 Wis. Adm. Codes for landspreading by permitted farms who accept large volumes (>30% total volume) of industrial wastes into their manure storage units. If requirements from s. NR 214.17, s. NR 214.18, and/or ch. NR 243 Wis. Adm. Codes conflict with one another the more stringent standard applies.

The purpose of this appendix is to list applicable code requirements and to identify the differences between chs. NR 214 and NR 243, Wis. Adm. Codes. For some manure storage units (i.e. older units), ch. NR 213 Wis. Adm. Code may apply. This outline and these differences are provided to summarize requirements for permit drafters and potential permittees considering storage of >30% (total volume) of industrial liquid waste.

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Assumptions

1. Industrial waste(s) meet applicability requirements of s. NR 214.02 Wis. Adm. Code.
2. Industrial waste is stored and mixed with manure (under the farm's WPDES permit).
3. Total industrial waste volume exceeds 30% (total volume) of the manure storage unit.

Definitions

In addition to the definitions provided under Section 1.0 of these procedural instructions, the following definitions apply to Appendix J.

1. Conduit to a navigable water: means a natural or man-made area or structure that discharges to a navigable water via channelized flow. This includes open tile line intake structures, open vent pipes, sinkholes, agricultural well heads, drainage ditches that discharge to navigable waters and grassed waterways that drain directly to a navigable water (referenced from s. NR 243.03(14), Wis. Adm. Code).
2. Direct conduits to groundwater: mean wells*, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater quarries, or depressional groundwater recharge areas over shallow fractured bedrock (referenced from s. NR 243.03(20), Wis. Adm. Code). *Note: Wells include non-potable wells such as irrigation and monitoring wells.*
3. Surface water quality management areas (“SWQMA”): means all of the following:
 - a) The area within 1,000 feet from the ordinary high water mark of navigable waters that consist of a lake, pond or flowage.
 - b) The area within 1,000 feet from the high water mark of navigable waters that consist of a glacial pothole lake.
 - c) The area within 300 feet from the ordinary high water mark of navigable waters that consist of a river or stream or other non-lake navigable waters.
 - d) The area within 300 feet of conduits to navigable waters.

Note: Referenced from s. NR 243.03(66), Wis. Adm. Code.

4. Wetland means areas delineated on a hydric soils map that are dominated by hydrophytic vegetation. Wetlands do not include prior converted or farmed wetlands (referenced from s. NR 243.03(75), Wis. Adm. Code).

Note: This definition does not apply to non-WPDES permitted farms.

Nutrient and Pathogen Limitations

Nitrogen and Phosphorus

- Maximum allowable rate for all major nutrients must be consistent with NRCS Standard 590 and UW Publication A2809. *Note: The department recommends the permittee/applicant use SnapPlus to determine the allowable rate.*
- Fields with a soil test P level 100 ppm or less may receive applications based on the nitrogen need of the current/planned crop (s. NR 214.17(4)(d)(9) or s. NR 214.18(4)(d), Wis. Adm. Code; ch. NR 243 Wis. Adm. Code; NRCS 590).
- Nitrogen is based on the need of the cover crop. Nitrogen for all other sources (commercial fertilizers, legume credits, manure credits, industrial waste(s), septage, biosolids, or any other nutrient source) must be credited against the total nitrogen need of the crop.
- Fields with a soil test P level between 101 and 199 ppm may receive applications provided that the cumulative application of phosphorus does not exceed 50% of the cumulative

annual crop phosphorus removal over the rotation or the next 4-year period, whichever is less. (s. NR 243.14(5)(b)1., Wis. Adm. Code)

- Fields with a soil test P level 200 ppm or greater, applications are prohibited unless the permittee receives department approval. (s. NR 243.14(5)(b)2., Wis. Adm. Code)

Chloride

The total pounds of chloride applied shall be limited to 170 pounds per acre per year or 340 pounds per acre per 2 year period. (s. NR 214.17(4)(d)7., Wis. Adm. Code)

Sodium

The total pounds of sodium applied may be limited to prevent alteration of soil properties or groundwater contamination (s. NR 214.17(4)(d)8., Wis. Adm. Code)

Other Nutrients/Substances

The concentration of any wastewater parameter that may impact groundwater quality shall be limited at the point of discharge to a value that will minimize the concentration of the substance in the groundwater to the extent technically and economically feasible and will prevent exceedance of the preventive action limit in the groundwater (s. NR 214.17(4)(b) or s. NR 214.18(4)(b), Wis. Adm. Code).

Pathogens

Wastes containing viable pathogens may not be applied on fields used for growing crops that may be consumed raw by humans. (s. NR 214.17(4)(c), Wis. Adm. Code)

Vertical Setbacks

Spring, Summer, Fall Spreading

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
Depth to Bedrock <24”	Prohibited	s. NR 243.14(2)(b)7. Wis. Adm. Code
Depth to Bedrock 24 - 36”*	Maximum weekly volume (see Table 3 from NR 214) or other nutrient rate limitations, whichever is less.	NRCS 590(V)(A)(1)(f); ss. NR 214.17(2)(h), NR 214.18(18(2)(g), NR 214.17(4)(d)6., and NR 243.14(5) Wis. Adm. Code
Depth to Bedrock >36”	Maximum daily rate of 13,500 gallons/acre and maximum weekly volume (see Table 3 from NR 214) or other nutrient rate limitations, whichever is less.	NRCS 590(V)(A)(1)(f); ss. NR 214.17(2)(h), NR 214.18(2)(g), NR 214.17(4)(d)5., NR 214.17(4)(d)6., and NR 243.14(5) Wis. Adm. Code
Depth to Groundwater** <24”	Prohibited	s. NR 243.14(2)(b)7. Wis. Adm. Code
Depth to Groundwater** 24 - 36”*	Maximum weekly volume (see Table 3 from NR 214) or	NRCS 590(V)(A)(1)(f); ss. NR 214.17(2)(h), NR 214.18(2)(g), NR

	other nutrient rate limitations, whichever is less.	214.17(4)(d)6., and NR 243.14(5) Wis. Adm. Code
Depth to Groundwater** >36”	Maximum daily rate of 13,500 gallons/acre and maximum weekly volume (see Table 3 from NR 214) or other nutrient rate limitations, whichever is less.	NRCS 590 V(A)(1)(f); ss. NR 214.17(4)(d)5., NR 214.17(2)(h), NR 214.18(2)g), NR 214.17(4)(d)6., and NR 243.14(5) Wis. Adm. Code

*Department has authority to prohibit applications on soils with less than 36” to groundwater or bedrock.

**Permittee must field verify depth to groundwater on ‘W’ soils or any other soil that may have groundwater near the ground’s surface prior to land application.

Winter Spreading

Winter conditions are defined as having any amount of snow cover and/or one-half inch of frost in the ground’s surface (per ss. NR 243.03(24) and NR 243.03(60) Wis. Adm. Code).

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
Depth to Bedrock <60 inches*	Prohibited	s. NR 243.14(2)(b)10., Wis. Adm. Code
Depth to Bedrock >60 inches	See “Soil and Field Condition Restrictions” Table below	
Depth to Groundwater < 24 inches	Prohibited	s. NR 243.14(2)(b)7., Wis. Adm. Code
Depth to Groundwater > 24 inches**	See “Soil and Field Condition Restrictions” Table below	

*s. NR 243.14(2)(b)(10), Wis. Adm. Code prohibits application over fractured bedrock; all types of bedrock in Wisconsin can be fractured and therefore this requirements is applied to all soils with bedrock within 60” of the ground’s surface.

**Department has authority to prohibit applications on soils with less than 36” to groundwater or bedrock.

Emergency Winter Spreading

Applications for emergency winter spreading will have the same vertical setbacks at winter spreading however; the application rates differ. See the “Slope Restrictions” section below for emergency winter spreading application rates.

Chapter NR 214 Wis. Adm. Code

Table 3
Maximum Weekly Volume of Liquid Waste to be Applied
to Landspreading Sites (gal/ac/wk or in/wk)

Soil Texture	18"–36" Depth to Groundwater or Bedrock	Greater than 36" Depth to Groundwater or Bedrock
Sand	6,750 (¹ / ₄ in.)	13,500 (¹ / ₂ in.)
Sandy Loam	13,500 (¹ / ₂ in.)	27,000 (1 in.)
Loam	13,500 (¹ / ₂ in.)	27,000 (1 in.)
Silt Loam	13,500 (¹ / ₂ in.)	27,000 (1 in.)
Clay Loam	13,500 (¹ / ₂ in.)	20,000 (³ / ₄ in.)
Clay	6,750 (¹ / ₄ in.)	13,500 (¹ / ₂ in.)

Horizontal Setbacks

Spring, Summer, Fall Spreading

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
Private Well	100 feet	s. NR 243.14(2)(b)9. Wis. Adm. Code
Private Well	250 feet	ss. NR 214.17(2)(c), NR 214.18(2)(c), Wis. Adm. Code
Community Well	1,000 feet	ss. NR 214.17(2)(c) and NR 243.14(2)(b)9. Wis. Adm. Code
Direct Conduit to Groundwater	100 feet and 200 feet upslope if surface applied	NRCS 590 (V)(A)(2)(a)(4); ss. NR 243.14(2)(b)8. Wis. Adm. Code
Inhabited Dwelling	500 feet*	ss. NR 214.17(2)(b), NR 214.18(2)(b), Wis. Adm. Code
Wetland	50 feet when incorporated or injected; 100 feet when vegetative buffer strip is present; 200 feet when surface applied and no buffer	ss. NR 214.17(2)(g), NR 214.18(2)(d), Wis. Adm. Code
Surface Water (Perennial Streams, Intermittent Streams, Lakes, Ponds & Flowage)	50 feet when incorporated or injected; 100 feet when vegetative buffer strip is present; 200 feet when surface applied and no buffer; subject to a <i>SWQMA</i> and maximum rates within <i>SWQMA</i> consistent with Table 3 in Ch.	ss. NR 214.17(2)(g), NR 214.18(2)(d), and NR 243.14(4) Wis. Adm. Code

	NR 243 for surface applications	
Dry Run, Drainageway, flow channel, & areas of concentrated flow that drain directly to surface water and navigable waters.**	50 feet when incorporated or injected; 100 feet when vegetative buffer strip is present; 200 feet when surface applied and no buffer; subject to a <i>SWQMA</i> and maximum rates within <i>SWQMA</i> consistent with Table 3 in Ch. NR 243 for surface applications	ss. NR 214.17(2)(g), NR 214.18(2)(d), and NR 243.14(4) Wis. Adm. Codes
Dry Run, Drainageway, flow channel, & areas of concentrated flow that <u>do not</u> drain directly to surface water and navigable waters**	50 feet when incorporated or injected; 100 feet when vegetative buffer strip is present; 200 feet when surface applied and no buffer	ss. NR 214.17(2)(g) and NR 214.18(2)(d), Wis. Adm. Code
Other conduits to navigable water: open tile line intake structures, open vent pipes, sinkholes***, & agricultural well heads.	21-100 feet and subject to a <i>SWQMA</i> and maximum rate within <i>SWQMA</i> consistent with Table 3 in Ch. NR 243 for surface applications.	s. NR 243.14(4) Wis. Adm. Code

*Setback distance may be reduced to 200 feet with written consent from affected owners and occupants and the application is injected or incorporated. In addition, the department has authority to require a greater setback distance.

**s. NR 214.17 Wis. Adm. Code setbacks include both surface water and ch. NR 243 Wis. Adm. Code navigable waters.

***Sinkholes are also considered to be direct conduits to groundwater which requires a 100 foot setback and 200 foot setback when surface applications occur.

Chapter NR 243 Wis. Adm. Code

Surface Texture Class ¹	Max Application Rate (gallons/acre)
Fine	5,000
Medium	7,500
Coarse	10,000

¹ Fine – clay, silty clay, silty clay loam, clay loam.

Medium – sandy clay, sandy clay loam, loam, silt loam, silt.

Coarse – loamy sand, sandy loam, sand. This category includes peat and muck based on their infiltration capacity.

Winter Spreading

Winter spreading of industrial liquid waste is prohibited unless the waste is incorporate or injected and snow depth is less than 4". When winter spreading is allowable the applicator must following the horizontal setbacks used for spring, summer, fall spreading.

Emergency Winter Spreading

Restrictive Feature	Requirement	Applicable Code References
Private Well	300 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code
Community Well	1,000 feet	ss. NR 214.17(2)(c), NR 21.18(2)(c), and NR 243.14(2)(b)9. Wis. Adm. Code
<i>Direct Conduit to Groundwater</i>	300 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code
Inhabited Dwelling	500 feet*	s. NR 214.17(2)(b), NR 214.18(2)(b), Wis. Adm. Code
<i>Wetland</i>	200 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code
Surface Water (Perennial Streams, Intermittent Streams, Lakes, Ponds & Flowage)	300 feet for perennial & intermittent streams and 1,000 feet for lakes, ponds, and flowage.	s. NR 243.14(7)(d)1. Wis. Adm. Code
Dry Run, Drainageway, flow channel, & areas of concentrated flow that drain directly to navigable waters.	300 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code
Dry Run, Drainageway, flow channel, & areas of concentrated flow that <u>do not</u> drain directly to navigable waters.	200 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code
<i>Other conduits to navigable water:</i> open tile line intake structures, open vent pipes, sinkholes, & agricultural well heads.	300 feet	s. NR 243.14(7)(d)1. Wis. Adm. Code

*Setback distance may be reduced to 200 feet with written consent from affected owners and occupants and the application is injected or incorporated. In addition, the department has authority to require a greater setback distance.

Slope Restrictions

Spring, Summer, Fall Spreading

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
12% or less	Allowable	--
>12%	Prohibited	ss. NR 214.17(2)(f) and NR 214.18(2)(f), Wis. Adm. Code

Winter Spreading

Winter spreading of liquid waste is prohibited unless the waste is incorporate or injected and snow depth is less than 4”.

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
2% or less	Allowable	s. NR 214.17(2)(f) Wis. Adm. Code
2-6%	Allowable [case-by-case approval]	s. NR 214.17(2)(f) Wis. Adm. Code
>6%	Prohibited	ss. NR 214.17(2)(f) and NR 214.18(2)(f), Wis. Adm. Code

Emergency Winter Spreading

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
0-2%*	Maximum daily rate of 6,800 gallons per acre, maximum volume of 7,000 gallons per winter season, or 60 lbs. P per acre, whichever is less.	ss. NR 214.17(4)(d)5., NR 214.18(2)(f), and NR 243.14(7)(d)1.
2-6%**	Maximum volume of 3,500 gallons per winter season or 30 lbs. P per acre, whichever is less.	s. NR 243.14(7)(d)1.
>6%	Prohibited	ss. NR 214.17(2)(f), NR 214.18(2)(f), and NR 243.14(7)(d)1.

*Pre-tillage (i.e. fall tillage) required; does not have to be along the contour.

**Pre-tillage (i.e. fall tillage) required along the contour.

Soil and Field Condition Restrictions

Spring, Summer, Fall, Winter, Emergency Winter Spreading

<i>Restrictive Feature</i>	<i>Requirement</i>	<i>Applicable Code References</i>
Saturated Soils	Prohibited	s. NR 243.14(2)(b)5. Wis. Adm. Code
Permeable Soils ('P' soils)	Applications in late summer or fall apply the requirements of NRCS 590 V.B.2. & 3.	NRCS 590(V)(B)(2) and (3)
Ponding due to Application	Prohibited	ss. NR 214.17(4)(d)2. and NR 243.14(2)(b)1. Wis. Adm. Code
Active Snow Melt of Field(s)	Prohibited	s. NR 243.14(2)(b)11. Wis. Adm. Code
Snow Depth 1-4 Inches	Inject or immediately incorporate; maximum rate of 6,800 gallons/acre; maximum weekly volume (see Table 3 from ch. NR 214 Wis. Adm. Code) or other nutrient rate limitations, whichever is less	NRCS 590(V)(A)(1)(f); ss. NR 243.14(7)(b)2., NR 214.17(4)(d)5., and NR 214.17(4)(d)6. Wis. Adm. Code
Snow Depth > 4 Inches	Prohibited*	s. NR 243.14(7)(b)3. Wis. Adm. Code
Frozen Ground	Surface applications prohibited*	s. NR 243.14(7)(a) Wis. Adm. Code
February and March	Surface application prohibited*	s. NR 243.14(7)(c) Wis. Adm. Code
Tolerable ('T') Soil Loss	T over the crop rotation cannot be exceeded. If T is exceeded applications are prohibited.	NRCS 590(V)(A)(2)(a)(6)
Phosphorus Index**	The average PI over the rotation must be 6*** or lower.	NRCS 590(V)(C)(2)(a)

* Except for department approved emergencies.

**Not applicable if the farm uses the soil test P phosphorus management strategy.

***For emergency winter spreading the field must meet an acute loss index value of 4 or less.

NRCS Standard 590 V.B.2. & 3.

2. When manure is applied in late summer or fall to meet the fertility needs of next year's crop and soil temperatures are greater than 50°F, apply one of the following options:
 - a. Use a nitrification inhibitor with liquid manure and limit N rate to 120 pounds available N per acre.
 - b. Delay applications until after September 15 and limit available N rate to 90 pounds per acre.
 - c. Apply to fields with perennial crops or fall-seeded crops. N application shall not exceed 120 pounds available N per acre or the crop N requirement, whichever is less.
3. When manure is applied in the fall and soil temperatures are 50°F or less, limit available N from manure application to 120 pounds per acre or the crop N requirement, whichever is less.

10.10. Appendix K. Template approval letter for mixing of industrial sludge into CAFO manure storage unit (industrial wastewater <30% total volume). Note: Yellow highlighted areas may be kept/deleted as necessary. *Note: This is an example approval letter from the Runoff Management Program and may be modified without notification.*

[Enter Date]

[Enter CAFO Contact Information]

SUBJECT: Nutrient Management Plan (NMP) Non-Substantial Revision Approval, Acceptance of Offsite Waste Less than 30%, [Farm Name], WPDES Permit No. [Permit #]

Dear Mr./Ms./Messrs. [Enter Last Name]:

After completing our review of [Farm Name's] NMP revision request to add off site waste to the farm's manure lagoon the Wisconsin Department of Natural Resources (department) is providing conditional approval that is consistent with ch. NR 243, Wis. Adm. Code. A revision to the NMP to accept low volumes of industrial sludge (less than 30%) is considered a non-substantial revision to the NMP. The NMP non-substantial revision request was submitted by [Applicant Name, Applicant Company], and received by the department on [Date Received].

By approving this request, the department has determined that:

1. [Farm Name] will be able to maintain at least 180-days of storage for liquid manure and process wastewater with the addition of the offsite waste.
2. [Farm Name] has an adequate land base to account for the increased volume of waste.
3. The offsite waste meets the criteria under s. NR 214.02(1), Wis. Adm. Code.
4. [Farm Name] is not accepting other offsite wastes into [Manure Storage Name].

On [Date Received] the department received a NMP non-substantial revision request from [Farm Name] to accept [Waste Type] from [Waste Generator Name] into [Manure Storage Name]. The department hereby approves the [Date Received] NMP non-substantial revision request to modify [Farm Name's] NMP subject to the following conditions:

1. [Waste Type] will only be mixed into [Manure Storage Name].
2. At any given time, the percent of industrial sludge in [Manure Storage Name] will not exceed 30% total volume.
3. [FOR SLUDGE CONTAINING HIGH CONCENTRATION OF METALS]: Cumulative amount of cadmium, copper, lead, nickel, and zinc may not exceed the levels (pounds/acre) list in Table 4 (s. NR 214.18(4)(g), Wis. Adm. Code). No more than 0.45 pounds/acre of cadmium may be spread annually on land used for production of food chain crops (per s. NR 214.18(4)(f), Wis. Adm. Code)

4. Analytical results of [*Waste Type*] and copies of the daily disposal log for all [*Waste Type*] mixed into [*Manure Storage Name*] will be submitted annually with the NMP Update.
5. If [*Farm Name*] is notified by the industrial sludge generator that there has been a change in the waste stream process that would result in a change to the waste characteristics, [*Farm Name*] will notify the department of the change within 7 days.
6. [*INSTANCES REQUIRING NR 214 REQUIREMENTS*]: On a case-by-case basis other requirements in ch. NR 214, Wis. Adm. Code, specifically s. NR 214.18(2) through (7), may be added if deemed necessary. Note: The additional requirements must be identified in the updated NMP.

This conditional approval does not limit the department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with ch. NR 243, Wis. Adm. Code and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at [*Enter Phone Number or Email Address*].

Sincerely,

[*Enter Signature Block*]

cc: [*Enter Supervisor Name*], WDNR Watershed Field Supervisor, [*Enter Email*]
[*Enter Name*], WDNR Runoff Management Section Chief [*Enter Email*]
[*Enter Name*], WDNR Nutrient Management Program Coordinator [*Enter Email*]
[*Enter Specialist Name*], WDNR Wastewater Specialist, [*Enter Email*]
[*Enter County Contact, Title, Email*]
[*Enter Crop Consultant, CCA, Company Name, Email*]
File

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats, you have 30 days after the decision is mailed, or otherwise served by the department, to file your petition with the appropriate circuit court and serve the petition on the department. Such a petition for judicial review must name the department of natural resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to serve a petition of hearing on the Secretary of the department of natural resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

10.11 Appendix L. Template approval letter (sludge generator) for exemption to mix industrial sludge into manure storage unit.

[Enter Date]

[Enter Authorized Representative Name]

[Enter Title]

[Enter Facility Name]

[Enter Mailing Address]

[City, State, Zip Code]

RE: Approval to mix industrial sludge into [Enter Manure Storage Name]
[Enter Waste Generator Facility Name] (WPDES permit # [Enter WPDES Permit #])

Dear [Enter Name],

Thank you for submitting a request to store industrial sludge in the [enter manure storage unit] located at [Enter Legal Description or Address of Manure Storage Unit]. This request package included the streamlined exemption to mix small volumes of industrial sludge into this manure storage unit. The Wisconsin Department of Natural Resources (department) has reviewed and approved this request, provided the following provisions are met.

1. [Enter Facility Name] will update the facility's land application management plan to include this manure storage unit and the streamlined exemption. The land application management plan must be updated and submitted to the department within 30 days of receipt of this letter.
2. [Enter Facility Name] will provide representative analytical results of industrial sludge to the owner of the manure storage unit annually. In addition, the manure storage unit owner shall be notified of any changes in process that may result in changes to waste stream characteristics or pollutants.
3. [Enter Facility Name] will maintain a daily disposal log for all industrial sludge mixed into this manure storage unit. An example daily log is attached with this letter (Attachment #1).
4. Industrial sludge must be less than 10% of the total volume of the manure storage unit. A blank industrial sludge calculation worksheet is provided (Attachment #2).
5. Total volume mixed to this manure storage unit will be reported on the 3400-052 ("Other Methods of Disposal or Distribution" report). This report is due January 31, following the year in which industrial liquid wastes is mixed into a manure storage unit.
6. Pursuant to county regulations, the manure storage unit owner may be required to update their NRCS 590 nutrient management plan of approval of this letter to include the additional

industrial sludge. Note: The department does not need to see a copy of this nutrient management plan.

7. *[Enter Facility Name]* will periodically communicate with the manure storage owner to verify that no additional waste sources (industrial wastes, biosolids, septage, etc.) are being mixed into this manure storage unit.

If you have any questions regarding this approval letter, please call me at *[Enter Phone Number]* or email me at *[Enter Email Address]*. Thank you for your attention to this matter.

Sincerely,

[Enter Signature Block]

cc. permit file
[Enter Supervisor Name], WDNR Watershed Field Supervisor, *[Enter Email]*
[Enter Name], WDNR Runoff Management Section Chief *[Enter Email]*
[Enter Name], WDNR Nutrient Management Program Coordinator *[Enter Email]*
[Enter Specialist Name], WDNR Wastewater Specialist, *[Enter Email]*
[Enter County Contact, Title, Email]
[Enter Crop Consultant, CCA, Company Name, Email]

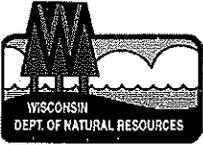
Attachments: Example daily disposal log
Industrial liquid waste calculation worksheet

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11.0 Acknowledgements: These procedural instructions were developed by the WDNR TDML Landspreading Work Group. This group is composed of members from the Groundwater (Mary Vollbrecht and Bill Phelps), Runoff Management (Mary Anne Lowndes, Casey Jones, and Joe Baeten), and Wastewater (Fred Hegeman, Tim Ryan, Mike Vollrath, Alan Hopfensperger, and Steve Warrner) programs. The Landspreading Work Group would also like to thank the following staff for assistance drafting this document: Michelle Balk, Alison Canniff, Ian Hansen, Lacey Hillman, Leanne Hinke, Emily James, Jason Knutson, Trevor Moen, Kelley O'Connor, Alexis Peters, Heidi Schmitt-Marquez, Doris Thiele, Gretchen Wheat, and Nate Willis. For any questions regarding this document please contact the Landspreading Work Group coordinators, Fred Hegeman and Steve Warrner.



WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NOTICE OF FINAL GUIDANCE & CERTIFICATION

Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.

DOCUMENT ID

WY-19-0014

DOCUMENT TITLE

Mixing of Industrial Wastes (Industrial Liquid Wastes and Industrial Sludges) into Manure Storage Units: How to Review and Approve

PROGRAM/BUREAU

Water Quality

STATUTORY AUTHORITY OR LEGAL CITATION

Ch. NR 214, Wis. Adm. Code

DATE SENT TO LEGISLATIVE REFERENCE BUREAU (FOR PUBLIC COMMENTS)

12/23/2019

DATE FINALIZED

01/23/2020

DNR CERTIFICATION

I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.

Signature

Date

1/29/20