



WPDES PERMIT

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

GENERAL PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 283, Wisconsin Statutes, any facility engaged in the

LANDSPREADING OF INDUSTRIAL SLUDGE

located in the State of Wisconsin and meeting the applicability criteria listed in this General Permit, is permitted to discharge these sludges to approved landspreading sites in Wisconsin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

State of Wisconsin Department of Natural Resources
For the Secretary

By

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Director, Bureau of Water Quality

12/19/2017
Date Permit Signed/Issued

TABLE OF CONTENTS

1 APPLICABILITY CRITERIA.....	1
2 LANDSPREADING SITE REQUIREMENTS.....	2
3 REPORTING REQUIREMENTS	3
4 INDUSTRIAL SLUDGE LANDSPREADING REQUIREMENTS.....	4
5 MANAGEMENT PLAN	10
6 OPERATIONAL REQUIREMENTS.....	11
7 STANDARD REQUIREMENTS	12
8 SUMMARY OF REPORTS DUE	19

1 Applicability Criteria

1.1 Activities Covered

This permit is applicable to sludge spreading systems or commonly referred to as landspreading of industrial sludge where sludge is defined by s. NR 214.03(34), Wis. Adm. Code, from an industrial, commercial or agricultural facility meeting the following conditions:

- Routine landspreading of low volume industrial sludge;
- Temporary or one-time landspreading of industrial sludge;
- Interim landspreading of high volume industrial sludge until an individual WPDES permit is issued or modified to include the landspreading discharge.

All industrial sludges shall have no detrimental effect on soils, vegetation or groundwater of a land treatment system and shall have beneficial properties as a soil conditioner or fertilizer.

1.2 Activities Not Covered

This permit is not applicable to landspreading discharges that meet any of the following conditions:

- Landspreading of by-product solids as defined in s. NR 214.03(4), Wis. Adm. Code;
- Landspreading of industrial liquid wastes as defined in s. NR 214.03(27), Wis. Adm. Code;
- Landspreading of domestic sewage sludge as defined in s. NR 204.03(55), Wis. Adm. Code;
- Landspreading of industrial sludge that exceeds the high-quality metal concentrations provided in Table 3 of s. NR 204.07(5), Wis. Adm. Code. The department may allow the applicant to be covered under this permit in the interim until an individual WPDES permit is issued or modified to include the landspreading discharge;
- Hauling of industrial sludges to another permitted facility such as a publicly-owned treatment works (POTW), a landfill, an incinerator, a livestock feeding operation, or a contract hauler;
- Landspreading of industrial sludges containing toxic or hazardous substances (such as phenolics, solvents, lubricants, biocides, pesticides, bioaccumulative organics, etc.), unless the permittee demonstrates to the Department of Natural Resources (hereafter department) that the discharge of such pollutants will be in such small quantities that no environmental pollution will result and the contaminants will not exceed groundwater quality standards established in ch. NR 140, Wis. Adm. Code. Discharges containing only toxic or hazardous substances to land treatment systems are prohibited under s. NR 664.0270, Wis. Adm. Code;
- Landspreading of industrial sludges containing contaminants which the department determines do not meet the requirements of s. NR 214.18(4), Wis. Adm. Code, and, therefore, may cause an exceedance of the groundwater standards established in ch. NR 140, Wis. Adm. Code;
- Landspreading of industrial sludges that are regulated under the provisions of ch. NR 518, Wis. Adm. Code;
- Landspreading of industrial sludges to wetlands;
- Landspreading of industrial sludges to surface waters;
- Landspreading of industrial sludges that will cause adverse effects including causing an incidental take of endangered and threatened resources, unless the department determines that the discharges comply with the endangered and threatened resource protection requirements of s. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code.

- Landspreading of industrial sludges within tribal lands. The Tribe or U.S. EPA regulates discharges from tribal Lands (land owned by or held in trust for the tribes and land within recognized reservation boundaries);
- Facilities that contract haul and mix wastes from more than one industrial source prior to landspreading.

2 Landspreading Site Requirements

2.1 Landspreading Site Approval

The permittee is authorized to landspread industrial sludge on sites approved in writing by the department in accordance with s. NR 214.18(2)(a), Wis. Adm. Code. The department may specify any site use restrictions or grant any case-by-case ch. NR 214, Wis. Adm. Code, exemptions in the written site approval letter. The permittee shall comply with all specified restrictions and exemptions. The permittee shall not spread industrial sludges on a site until approval is received from the department for the site. The department may require the permittee re-submit landspreading site information for existing spreading sites to confirm that the spreading areas meet the criteria specified in Section 2.2 of this permit. If an existing spreading site, or portion thereof, is found by the department to be environmentally unacceptable, a written notice will be issued to withdraw approval of that site or a portion of that site. The permittee shall landspread only on approved sites and shall comply with all requirements of this permit.

The permittee shall submit a land application site request package including the following information: 1) Land Application Site Request (Form 3400-053) or equivalent; 2) Verification of legal description (tax parcel record, land record, etc.) and; 3) Field authorization form (from field owner). The site request package may also include location maps showing nearby residences and wells, soil maps, information on separation to groundwater and bedrock, and other information that demonstrates that industrial sludge application on the site will comply with all applicable requirements of s. NR 214.18, Wis. Adm. Code, and the conditions of the general permit.

2.2 Landspreading Site Location Criteria

The landspreading site location criteria are included by reference from s. NR 214.18(2), Wis. Adm. Code. The permittee must comply with all these requirements.

1. Landspreading sites shall be located at least 500 feet from the nearest inhabited dwelling, except that this distance may be reduced to 200 feet if the sludges are incorporated with the soil and any affected owners and occupants give their written consent for the reduced separation distance. The department may require a greater separation distance depending on the type of sludge and potential for aesthetic and public health impacts.
2. Sludges may not be landspread closer than 1,000 feet from a well serving a community public water supply system and 250 feet from other potable water supply wells.
3. Sludge may not be landspread within 200 feet from any surface water course, dry run or wetlands, except that if a vegetative buffer strip is maintained between the site and the surface water, the department may approve a reduced separation distance to 100 feet. If the sludge is incorporated in the soil, the separation distance from any surface water may be reduced to a minimum of 50 feet.
4. Sludge may not be landspread on wetlands or on areas subject to flooding or ponding.
5. Landspreading sites shall be limited to a slope of 12% or less when the soil temperatures are above freezing. When the ground is frozen or snow covered, landspreading shall be restricted

to sites with slopes of 2% or less. Sites with slopes of 2-6% may be approved for winter time spreading on a case-by-case basis by the department.

6. Landspreading sites shall have at least 36 inches of separation between the ground surface and bedrock or groundwater. However, the department may allow a reduced separation distance to a minimum of 18 inches on a case-by-case basis provided the rate of industrial sludge application is reduced.

3 Reporting Requirements

The permittee shall comply with the following reporting requirements.

3.1 Daily Log

All discharge and monitoring activity shall be documented on log sheets. This includes the total daily sludge hauled volume. The original log sheets shall be kept by the permittee as described under Section 7.2.6 “Records Retention” in the Standard Requirements of this permit, and if requested, made available to the department. The total daily sludge hauled volume may be determined by actual measurement of the amount of industrial sludge in the hauling vehicles, or by calibration of the truck box or roll-off containers used to haul industrial sludge times the number of trips for the day.

3.2 Characteristic Report (Form 3400-49)

The analytical results from testing of industrial sludges that are landspread shall be reported by the date indicated on the Characteristic Report Form 3400-49. The report form shall be submitted electronically and is due 21 days after end of the reporting period whether or not waste is landspread in accordance with s. NR 214.18(5)(d), Wis. Adm. Code. Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the ‘eReport Certify’ page by a responsible executive officer, manager, partner or proprietor or duly authorized representative in accordance with s. NR 205.07(1)(g), Wis. Adm. Code. The ‘eReport Certify’ page certifies that the electronic report form is true, accurate, and complete.

The permittee shall use the following convention when reporting industrial sludge results: Pollutant concentrations less the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as <1.0 mg/kg.

Note: All sludge results shall be reported on a dry weight basis. Monitoring is only required during periods of active landspreading.

3.3 Annual Land Application Report (Form 3400-55)

The annual totals for the landspreading loadings of industrial sludges to field spreading sites shall be submitted electronically on the Land Application Report Form 3400-55 by January 31st, each year whether or not waste is landspread in accordance with s. NR 214.18(5)(c), Wis. Adm. Code. Amounts of waste shall be reported as dry weight. Following submittal of the electronic Land Application Report Form 3400-55, this form shall be certified electronically via the ‘eReport Certify’ page by a responsible executive officer, manager, partner or proprietor or duly authorized representative in accordance with s. NR 205.07(1)(g), Wis. Adm. Code. The ‘eReport Certify’ page certifies that the electronic report form is true, accurate, and complete.

3.4 Other Methods of Disposal or Distribution Report (Form 3400-52)

The permittee may submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not waste is hauled to another facility, landfilled, or incinerated. Following submittal of the electronic Other Methods of Disposal or Distribution Report

Form 3400-52, this form shall be certified electronically via the ‘eReport Certify’ page by a responsible executive officer, manager, partner or proprietor or duly authorized representative in accordance with s. NR 205.07(1)(g), Wis. Adm. Code. The ‘eReport Certify’ page certifies that the electronic report form is true, accurate, and complete.

Note: This form is not a requirement and is completely voluntary. However, the department recommends that permittees fill this form out when industrial sludges are hauled to another permitted facility such as a publicly-owned treatment works (POTW), a landfill, an incinerator, a livestock feeding operation, or a contract hauler.

4 Industrial Sludge Landspreading Requirements

4.1 Sampling Point(s)

The discharge shall be limited to landspreading of industrial sludges for the listed sampling point(s) on department approved landspreading sites or by hauling to another permitted facility.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
001	The landspreading of industrial sludges containing low concentrations of metals and nondetectable amounts of PCBs from an industrial, commercial or agricultural facility to department approved landspreading sites.
002	The landspreading of industrial sludges containing high concentrations of metals and/or detectable amounts of PCBs from an industrial, commercial or agricultural facility to department approved landspreading sites.

4.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations based on s. NR 214.18(5), Wis. Adm. Code.

4.2.1 Sampling Point (Outfall) 001 – Industrial Sludges with Low Metals

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Sludge Hauled		Tons/day	Daily	Total Daily	Record in a Daily Log. See Section 3.1
Solids, Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Nitrogen, Total Kjeldahl		Percent	Annual	Grab Comp	See Sections 4.3, 4.4, and 4.9.2
Chloride		Percent	Annual	Grab Comp	See Sections 4.3, 4.4 and 4.9.1
Phosphorus, Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Phosphorus, Water Extractable		% of Total P	Annual	Grab Comp	See Sections 4.3 and 4.4
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Organic Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Potassium, Total Recoverable		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
pH Field		s.u.	Annual	Grab	See Sections 4.4 and 4.9.5.
Lead, Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5
Zinc, Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5
Copper, Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5
Nickel, Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5
Cadmium, Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5
PCB, Total Dry Wt.		mg/kg	Once	Grab Comp	See Sections 4.4 and 4.5

4.2.2 Sampling Point (Outfall) 002 – Industrial Sludges with High Metals

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Sludge Hauled		Tons/day	Daily	Total Daily	Record in a Daily Log. See Section 3.1
Solids, Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Nitrogen, Total Kjeldahl		Percent	Annual	Grab Comp	See Sections 4.3, 4.4, and 4.9.2
Chloride		Percent	Annual	Grab Comp	See Sections 4.3, 4.4 and 4.9.1
Phosphorus, Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Phosphorus, Water Extractable		% of Total P	Annual	Grab Comp	See Sections 4.3 and 4.4
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Nitrogen, Organic Total		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
Potassium, Total Recoverable		Percent	Annual	Grab Comp	See Sections 4.3 and 4.4
pH Field		s.u.	Annual	Grab	See Sections 4.4 and 4.9.5.
Lead, Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, 4.7, 4.8 and 4.9.3

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Zinc, Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, 4.7, 4.8 and 4.9.3
Copper, Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, 4.7, 4.8 and 4.9.3
Nickel, Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, 4.7, 4.8 and 4.9.3
Cadmium, Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, 4.7, 4.8, 4.9.3 and 4.9.4
PCB, Total Dry Wt.		mg/kg	Annual	Grab Comp	See Sections 4.3, 4.4, 4.6, and 4.9.6

Daily Log – Monitoring Requirements and Limitations				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the department.				
Parameters	Limit	Units	Sample Frequency	Sample Type
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Application Rate	-	Tons/Acre/Day	Daily	Calculated

Annual Report - Requirements and Limitations				
The Annual Land Application Report (Form 3400-55) is due by January 31 st of each year for the previous calendar year.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Landspread	-	Acres	Annual	-
Total Amount Per Site	-	Pounds or Tons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

4.3 Sampling

Grab composite samples for all required parameters, except pH, shall be collected prior to landspreading which are representative of industrial sludge being discharged.

Note: Monitoring is only required during periods of active landspreading.

4.4 Initial Test Screening

Applicants shall conduct an initial test screening of the industrial sludge for all parameters listed in Section 4.2.1. The test results shall be submitted with the request for coverage document.

4.5 Industrial Sludge with Low Metals

Permittees with industrial sludge containing metals (cadmium, copper, lead, nickel, and zinc) that are less than or equal to 1/3 of the high-quality concentrations listed in Table 1 and/or has nondetectable amounts of PCBs are required to follow the monitoring requirements for Section 4.2.1. Permittees are exempt from the cumulative loading limits for metals found in Sections 4.9.3 and 4.9.4 and PCB requirements in Section 4.9.6. For new permittees, the initial test screening in Section 4.4 satisfies the reporting for the current permit term. Permittees that were covered under the previous general permit (WI-0057657-05-0) shall retest for metals and PCBs and report the results once every permit term to the department. The results shall be reported on the Characteristic Report (Form 3400-49). If a permittee changes any industrial processes or treatment process such as raw materials or chemicals during the permit term, the permittee shall retest for metals and PCBs and report the results to the department. The results shall be reported on the Characteristic Report (Form 3400-49) in the comments section for that year.

Table 1. High Quality Metal Concentrations

Metal	High Quality Concentration (mg/kg) Dry Weight	Calculated 1/3 Concentration (mg/kg) Dry Weight
Cadmium	39	13
Copper	1,500	500
Lead	300	100
Nickel	420	140
Zinc	2,800	933

4.6 Industrial Sludge with High Metals

Permittees with industrial sludge containing metals (cadmium, copper, lead, nickel, and zinc) that exceed 1/3 of the high-quality concentrations listed in Table 1 or contains detectable amounts of PCBs shall follow the monitoring requirements provided in Section 4.2.2. The results shall be reported on the Characteristic Report (Form 3400-49). Permittees shall follow the cumulative loading limits for metals found in Sections 4.9.3 and 4.9.4 and PCB requirements in Section 4.9.6. If a permittee changes any industrial processes or treatment process such as raw materials or chemicals during the permit term, the permittee shall retest for metals and PCBs and report the results to the department. The results shall be reported on the Characteristic Report (Form 3400-49) in the comments section for that year.

4.7 Metals that Exceed High Quality Concentrations

Permittees with industrial sludge containing metals that exceed the high-quality concentrations in Table 1 are not applicable to this permit and must apply for an individual WPDES permit. However, this permit can be used in the interim until the an individual WPDES permit is issued or modified to include the landspreading discharge. Permittees shall follow the monitoring requirements provided in Section 4.2.2.

4.8 Metals that Exceed Ceiling Concentrations (Prohibited)

The permittee is prohibited from landspreading if the industrial sludge exceeds the metal ceiling concentrations in Table 2. Disposal options when sludge ceiling concentrations are exceeded include:

retesting, mixing with another sludge or other material and demonstration of compliance with Table 2, landfilling or incinerating.

Table 2. Ceiling Concentrations for Metals

Metal	Dry Weight Concentration (mg/kg)
Cadmium	85
Copper	4,300
Lead	840
Nickel	420
Zinc	7,500

4.9 Landspreading Limitations

The permittee shall comply with the following industrial sludge landspreading limitations based on s. NR 214.18(4), Wis. Adm. Code.

4.9.1 Chloride Requirements for Industrial Sludge

The total pounds of chloride applied shall be limited to 340 pounds per acre for any 2 consecutive years. Calculate the chloride loading as follows:

$$\text{For lbs: } \frac{\text{lbs of wet solids} \times \% \text{solids} \times \% \text{chloride}}{\text{acres land applied} \times 100 \times 100} = \text{lbs chloride/acre}$$

$$\text{For gals: } \frac{(\text{mg/L Chloride}) \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs chloride/acre}$$

The most recent annual total solids sample shall be used in the calculation of chloride loading for pounds.

4.9.2 Nitrogen Requirements for Industrial Sludge

The total number of pounds of nitrogen that may be landspread per acre per year shall not exceed the nitrogen needs of the cover crop (based on a reliable reference such as: *A2809 Nutrient Application Guidelines for Field, Vegetable and Fruit Crops in Wisconsin*, from UW-Ext., <http://www.soils.wisc.edu/extension/pubs/A2809.pdf>) minus any other nitrogen added to the landspreading site, including fertilizer or manure. Nitrogen applied can be calculated on the basis of plant available nitrogen, as long as the release of nitrogen from the organic material is credited to future years. This permit requires that the Total Kjeldahl Nitrogen application amount in any calendar year shall not exceed 165 pounds per acre per year on any site, except when alternate numerical nitrogen loading limits are approved in writing via the department's landspreading management plan approval. Calculate nitrogen loading as follows ("TKN" represents "Total Kjeldahl Nitrogen"):

$$\text{For lbs: } \frac{\text{lbs of wet solids} \times \% \text{solids} \times \% \text{TKN}}{\text{acres land applied} \times 100 \times 100} = \text{lbs TKN/acre}$$

$$\text{For gals: } \frac{(\text{mg/L TKN}) \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs TKN/acre}$$

The most recent annual total solids sample shall be used in the calculation of TKN loading for pounds.

4.9.3 Metals Requirements for Industrial Sludge

The amount of each metal spread at any landspreading site shall not exceed the maximum cumulative amount provided in Table 3 over the lifetime of the site. The cation exchange capacity of the soil at a landspreading site shall be determined by a laboratory or estimated using standard test methods or acceptable agricultural practices.

Table 3. Maximum Cumulative Metal Loading for a Landspreading Site

Metal	Soil Cation Exchange Capacity (meq/100g)			
	Less than 5 (lbs/ac)	5-10 (lbs/ac)	10-15 (lbs/ac)	Greater than 15 (lbs/ac)
Lead	445	890	1,335	1,750
Zinc	225	445	670	890
Copper	110	220	335	445
Nickel	45	90	135	180
Cadmium				
Soil pH < 6.5	4.5	4.5	4.5	4.5
Soil pH ≥ 6.5	4.5	9.0	13.5	18

The representative concentration of each metal in the sludge shall be used to determine the value of the metal loading at each site per landspreading event. When calculating metal loadings, the permittee may substitute a zero for any metal that is not detected using the appropriate analysis method. The permit shall calculate the loading for each metal per landspreading site per landspreading event as follows:

$$\frac{\text{lbs of Each Metal}}{\text{Acre}} = \frac{(\text{lbs of wet solids}) \times (\% \text{ total solids})}{(\text{acres land applied}) \times 100} \times \frac{(\text{mg/kg metal})}{1,000,000}$$

Each calculated metal loading per landspreading site shall be summed together with past landspreading events for that site to calculate lifetime cumulative metal loadings.

4.9.4 Cadmium Requirements for Industrial Sludge

No more than 0.45 pounds per acre of cadmium may be spread annually on land used for production of food chain crops. As defined in s. NR 214.03(15), Wis. Adm. Code, “Food-chain crop” means a crop grown for human consumption or pasture, forage and feed grains for animals whose products are consumed by humans. Tobacco is considered a crop grown for human consumption.

4.9.5 Soil pH

The pH of the sludge and soil mixture shall be 6.5 or higher at the time the sludge is spread, except that the soil pH may be less than 6.5 if the average sludge cadmium (over the previous four quarters) concentration is 2 mg/kg (dry weight) or less.

4.9.6 PCB Requirements for Industrial Sludge

Sludge containing concentrations of PCBs equal to or greater than 10 mg/kg (dry weight) shall be incorporated into the soil when applied to land used for producing animal feed, including pasture crops for animals raised for the purpose of producing milk. The department may allow surface application of the sludge if it is assured that the PCB content is less than 0.2 mg/kg (actual

weight) in animal feed or less than 1.5 mg/kg (fat basis) in milk from animals consuming the feed.

4.9.6.1 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for “PCB, Total Dry Wt” is required by this permit, the PCB concentration in the sludge shall be determined as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported. **Note:** It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C – Florisil	3611B - Alumina
3640A - Gel Permeation instead of powder)	3660B - Sulfur Clean Up (using copper shot
3630C - Silica Gel	3665A - Sulfuric Acid Clean Up

5 Management Plan

5.1 Operate Consistent with an Approved Management Plan

All landspreading sites used for treatment of industrial sludge shall be operated in accordance with a department approved management plan. The management plan shall be consistent with the requirements of this permit, and s. NR 214.18, Wis. Adm. Code. A copy of the management plan shall be retained by the permittee and this plan shall be made available upon department inspection. If operational changes are needed affecting the character, quality or quantity of the sludge landspread, the management plan shall be amended by submitting a written request to the department for approval.

5.2 Submittal of the Management Plan

If a landspreading management plan has not been approved by the department prior to the reissuance of this permit, then the permittee shall submit a management plan to the department for approval not more than 60 days from the date of reissuance of this permit or from the date that coverage under this permit was granted, whichever is later. When coverage is granted under this permit, if the department determines that a previously approved management plan must be amended to comply with the conditions of this permit and s. NR 214.18(6)(c), Wis. Adm. Code, the permittee shall submit an amended landspreading management plan to the department not more than 60 days from the date that coverage under this permit was granted. Management plans shall be submitted to department staff identified in the document granting coverage under this permit.

5.3 Management Plan Content

The management plan shall specify information on sludge volumes and characteristics, beneficial or non-detrimental fertilizer or soil conditioner properties, production and pretreatment processes, description of all site limitations, vegetative cover control and removal, availability of storage, type of transportation and spreading vehicle, sludge application rates, load and rest schedules, contingency plans for periods of adverse weather, odor and nuisance abatement or any other pertinent information in accordance with s. NR 214.18(6)(c), Wis. Adm. Code.

6 Operational Requirements

The permittee shall comply with the following operational requirements.

1. There shall be no runoff or movement of sludges from the approved landspreading site. If runoff or movement occurs, all landspreading on the site shall cease immediately.
2. When necessary to prevent nuisance conditions, such as attraction of animals or objectionable odors, liquid industrial sludge shall be incorporated into the soil within 6 hours of landspreading as specified in s. NR 214.18(4)(c), Wis. Adm. Code.
3. Cake Sludge shall be plowed, disked, injected, or otherwise incorporated in the surface soil layer within the time period specified in the approved management plan as specified in s. NR 214.18(4)(c), Wis. Adm. Code.
4. The permittee is encouraged to landspread the sludges as it is transported to the fields; but if it becomes necessary to temporarily stockpile sludges in the fields, the stockpiled material must be landspread within 72 hours or sooner if specified in the approved management plan.
5. Any system used for the storage or stacking of sludges prior to landspreading shall be designed and constructed in accordance with ch. NR. 213, Wis. Adm. Code, or other design criteria as approved in the landspreading management plan. Plans and specifications shall be submitted to the department for approval of such storage or stacking systems as specified in s. NR 214.18(3)(b), Wis. Adm. Code.
6. Storage or stacking systems shall be sited and operated to minimize odors or other public nuisance conditions as specified in s. NR 214.18(3)(c), Wis. Adm. Code.

7. Vehicles used for transporting or landspreading the sludge shall be maintained to prevent spillage or leakage onto property that is not approved for spreading as specified in s. NR 214.18(6)(a), Wis. Adm. Code.
8. Vehicles used for landspreading sludges shall be equipped with a distribution system capable of applying the waste uniformly on the land surface as specified in s. NR 214.18(3)(a), Wis. Adm. Code.
9. Vehicles landspreading sludges shall be moving forward at all times of application unless the vehicle is equipped with a high-pressure spray nozzle that uniformly distributes the sludge over the land surface as specified in s. NR 214.18(6)(b), Wis. Adm. Code. If the vehicle is equipped with a high-pressure spray nozzle, the openings shall be sized to prevent plugging and located to minimize wind drift of the waste as specified in s. NR 214.17(3)(b), Wis. Adm. Code.
10. Sludges containing viable pathogens, such as those from meat or poultry processing operations, may not be applied on sites used for growing crops that may be consumed raw by humans as specified in s. NR 214.04(4), Wis. Adm. Code.

7 Standard Requirements

The conditions in ss. NR 205.07(1), 205.07(3), and 205.08(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements, except for s. NR 205.07(1)(n), Wis. Adm. Code, which does not apply to facilities covered under general permits. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirements can be found in the ss. NR 205.07(1), 205.07(3), and 205.08, Wis. Adm. Code.

7.1 General Conditions for General Permit Discharges

The permittee shall comply with the following general conditions for general permit discharges.

7.1.1 Request for Coverage

If an owner or operator of a facility or activity is proposing to discharge to waters of the State and the facility or activity's discharge meets the applicability criteria of this permit, the owner or operator shall submit a request for coverage document under this general permit (GP) as specified in s. NR 205.08(3), Wis. Adm. Code. If the facility's proposed discharge does not meet the applicability criteria under this permit, the owner or operator shall apply for a different GP or an individual permit. All requests of coverage must be mailed or emailed to the department regional GP reviewer. A listing of the GP reviewers for each region with mailing addresses and phone numbers can be found at <http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>. The request for coverage can be also be found at the same department website.

Permittees are required to submit initial test results of the industrial sludge to the department with the request for coverage document. The industrial sludge shall be sampled for all the parameters listed in Section 4.2.1.

Note: The department is in the process of developing and requiring electronic submissions of requests for coverage documents to discharge under this GP. Once the request for coverage documents are online, paper copies will be no longer accepted with a few exceptions. The department will post this update on our GP website.

7.1.2 Department Coverage Determination

Following submittal of a completed request for coverage document to the department, the department shall issue a letter of determination on whether the pollutant discharge is covered by this GP as specified in s. NR 205.08(3), Wis. Adm. Code. All applicants that request coverage under this GP shall have a letter of determination from the department granting them coverage

under this GP prior to discharge. If the applicant does not have a letter from the department granting or conferring coverage for a discharge to waters of the State under this GP, then they are not permitted to discharge, and enforcement action may be pursued against the applicant for discharging without a permit. The letter of determination will be sent via email or mail to the applicant.

7.1.3 Delegation of Signature Authority

In accordance with s. NR 205.07(1)(g), Wis. Adm. Code, the permittee must provide a delegation of signature authority (DSA) request (Form 3400-220, Delegation of Signature Authority) or equivalent for a duly authorized representative to submit specific documents on the behalf of a responsible executive, officer, manager, partner, or proprietor of a permitted discharge. An executive, officer, manager, partner, or proprietor can only delegate signature authority to a duly authorized representative if that person has responsibility for the overall operation of the facility or activity regulated by this GP. The DSA request shall specify the name of the individual and their employment position. The DSA request must be submitted to the department with the request for coverage document or together with the submittal of any required documents. If there are any changes to this request, a new DSA request shall be submitted to the department.

7.1.4 Permit Coverage Transfers

A permittee who will no longer control the permitted discharge may request that permit coverage be transferred to the person who will control the discharge as specified in s. NR 203.136(1)(p), Wis. Adm. Code. The transfer request (Form 3400-222, Transfer of Coverage) or equivalent shall be completed including the “Certification & Signature” section by both the permittee and the new authorized representative and sent via mail or email to the department. The department will then send a letter to the previous owner stating that their coverage is terminated under this GP. The transfer request shall contain the following information:

- The name and address of the facility;
- The Facility Identification Number;
- The names of the persons involved in the transfer, their signatures, and date of signatures;
- A description of any changes in the operation of the facility and;
- A statement of acknowledgement by the transferee that it will be the permittee of record and is responsible for compliance with the permit.

If the quality or quantity of the discharge has not changed at the facility, the department will send a letter of determination that grants coverage to the new authorized representative under this GP. If there have been significant changes at the permitted facility, the new authorized representative shall submit a request for coverage document to the department.

7.1.5 Permit Coverage Terminations

If a permittee no longer requires coverage under this GP because they are eliminating their discharge, the permittee shall notify the department and request that their coverage be terminated under this GP in accordance with ss. NR 203.136(3)(d) and NR 205.07(1)(L), Wis. Adm. Code. All coverage termination requests (Form 3400-221, Notice of Termination) or equivalent must be completed by the permittee including the “Certification & Signature” section and sent via mail or email to the department. The department will then send a letter to the permittee stating that their coverage is terminated under this GP.

7.1.6 Continuation of an Expired General Permit

Section NR 205.08(9), Wis. Adm. Code, provides that the terms and conditions of this GP shall continue to apply until this GP is revoked and reissued or until an individual permit is issued for

the discharge to which the GP applied. The status of expired GPs can be accessed at <http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>.

7.1.7 Modification or Revocation and Reissuance of a General Permit

If any condition of this GP is found to be invalid under s. NR 203.136, Wis. Adm. Code, the department may modify or revoke and reissue this GP. If this GP is modified, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing GP shall remain in effect for the duration of the existing GP. If this GP is revoked and reissued, the entire GP is reopened just as if the permit had expired and was being reissued for a new term. During any revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing GP until a new final GP is reissued.

7.1.8 Seeking Coverage under an Individual Permit

Facilities or discharges that are not eligible to be covered under this general permit or may not comply with the terms and conditions in this general permit or any other general permit, must seek coverage under an individual WPDES permit in accordance with s. NR 205.08(5), Wis. Adm. Code. To apply for individual permit, contact the appropriate WPDES permits staff based upon the location of the proposed discharge or industry type. For guidance and specific instructions for applying for an individual permit, please visit our website: <http://dnr.wi.gov/topic/wastewater/PermitApplications.html>.

Note: Applicants for new individual permits need to complete and submit a permit application far enough in advance so the department has time to process the application and issue the permit prior to the time discharge will commence. Maximum time deadlines for submitting applications for new discharges are specified in s. NR 200.05, Wis. Adm. Code. Based on these time periods, complete permit applications shall be received approximately six months before the desired start of discharge.

Applicants should also know that plans for any wastewater treatment system require department approval (up to 90 days) prior to construction. The time periods for department action on plan submittals may, in some cases, run concurrently with the permit processing time. For more advice on plan approvals, contact the appropriate WPDES permits staff based upon the location of the proposed discharge or industry type.

7.2 General Conditions for All Discharges

7.2.1 Duty to Comply

The permittee shall comply with all conditions of the permit. Any permit noncompliance is a violation of the permit and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit reissuance application. If a permittee violates any terms of the permit, the permittee is subject to the penalties established in ch. 283, Wis. Stats.

7.2.2 Permit Actions

As provided in s. 283.53, Wis. Stats., after notice and opportunity for a hearing the permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7.2.3 Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. The permit does not authorize any injury or damage to private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.

7.2.4 Inspection and Entry

The permittee shall allow an authorized representative of the department, upon the presentation of credentials, to:

- Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are required under the conditions of the permit;
- Have access to and copy, at reasonable times, any records that are required under the conditions of the permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under the permit; and
- Sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.

7.2.5 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

7.2.6 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application. All pertinent sludge information, including permit application information and other documents specified in the permit or ch. NR 214, Wis. Adm. Code, shall be retained for a minimum of 5 years.

7.2.7 Signatory Requirement

All permit applications, reports and other information requested by the department shall be signed by a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2., Wis. Adm. Code.

7.2.8 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent the likelihood of any adverse impacts to public health, the waters of the state, or the environment resulting from noncompliance with the permit.

7.2.9 Duty to Provide Information

The permittee shall furnish the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, terminating, suspending, revoking or reissuing the permit or to determine compliance with the permit. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall also furnish the department, upon request, copies of records required to be kept by the permittee.

7.2.10 Need to Halt or Reduce Activity Not a Defense

It is not a defense for a permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

7.2.11 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with s. NR 205.07(1)(p) and Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in ch. NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

7.2.12 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved landspreading management plan. Additional sites may not be used for the landspreading of sludge until department approval is received.

7.2.13 More Frequent Monitoring

As specified in s. NR 205.07(1)(r), if the permittee monitors any parameter more frequently than required by the permit, using test procedures specified in chs. NR 204 or 219, Wis. Adm. Code or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report.

7.2.14 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the department as specified in s. NR 205.07(1)(u)2, Wis. Adm. Code, shall not be subject to the reporting required under this section.

Note: Section 292.11(2)(a), Wis. Stats., requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.**

7.2.15 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or correct information to the department.

7.2.16 Permit as Enforcement Shield

Compliance with a permit during its term constitutes compliance for purposes of enforcement with 33 USC 1311, 1312, 1316, 1317, 1328, and 1345 (a) and (b), except for any toxic effluent standard or prohibition, and standards for sewage sludge use or disposal. If a new or revised toxic effluent standard or toxic prohibition becomes effective during the term of the permit, the permittee may be subject to enforcement action if the discharge exceeds the new or revised effluent standard for the toxic pollutant even though the discharge is in compliance with the existing permit. The permittee may also be subject to enforcement action standards for sewage sludge use or disposal. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code.

Note: Pursuant to ss. 283.89 and 283.91, Wis. Stats., violations of permit conditions or rule requirements are referred to the department of justice for enforcement.

7.3 General Conditions for Industrial Discharges

7.3.1 Spill Reporting

The permittee shall notify the department in accordance with ch. NR 706 (formerly ch. NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in the permit, or the spill or accidental release of the material is unregulated in the permit, unless the spill or release of pollutants has been reported to the department under this section.

7.3.2 Planned Changes

In accordance with ss. 283.31(4) (b) and 283.59 (1), Wis. Stats., the permittee shall report to the department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application or, if the new discharge will not violate the effluent limitations of the permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the department may modify the permit to specify and limit any pollutants not previously regulated in the permit.

7.3.3 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

8 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Due Date	Page
Land Application Site Request Form 3400-53	Prior to landspreading to any site	2
Management Plan	60 days after the date of reissuance of the permit or the date that coverage under the permit was granted, whichever is later	10
Characteristic Report Form 3400-49	21 days after the end of the reporting period whether or not waste is landspread	3
Annual Land Application Report Form 3400-55	January 31, following each year whether or not waste is landspread	3
Methods of Disposal or Distribution Report Form 3400-52	January 31, following each year whether or not waste is hauled to another permitted facility	3

Monitoring results obtained during the specified reporting period shall be summarized and reported on the forms listed above or other reporting form or system approved by the department (including the electronic landspreading reporting system). Paper copies of the monitoring forms will no longer be accepted. A copy of the submitted electronic landspreading report forms shall be retained by the permittee.

Any facility plans or plans and specifications for industrial pretreatment and industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921.