



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Biosolids Annual Report

Minnesota's Biosolids Program

Figure 11

The yearly completion and submittal of this form, including the certification statements, will fulfill the requirements of Minn. R. Chapter 7041 for annual reporting of biosolids landspreading activities. This form must be submitted to the Minnesota Pollution Control Agency (MPCA) at the address above **by December 31 following the cropping year**. *When bulk biosolids are applied, this form must be prepared by, or under the supervision of, a Type IV certified operator or inspector.*

Reporting period: September 1, _____ through August 31, _____

Facility Information

Facility name: _____ NPDES or SDS Permit number: _____
Contact person: _____ Phone number: _____
Work address: _____

Check here if biosolids were **not** land applied during this cropping year: ☐

Total quantity of biosolids land applied as bulk material: _____ Gallons or _____ Wet tons **and** _____ Dry tons

Total quantity of Class A biosolids sold or given away in bags or other containers: _____ Dry tons

Total quantity of biosolids transferred to another facility: _____ Dry tons **or** _____ Gallons

Transferred to what facility: _____ Contact person/phone # of facility: _____ / _____

Reporting of Biosolids Information

Pathogen reduction

Select the option/s used to meet pathogen reduction requirements:

Class B Options:

1. ☐ Geometric mean of fecal coliform determined
2. Process to Significantly Reduce Pathogens (PSRP) monitored:
☐ Aerobic ☐ Anaerobic ☐ Air dry ☐ Compost ☐ Lime
3. ☐ Process determined equivalent to a PSRP process monitored

Class A Options: (1 - 6 listed under 7041.1300, subp. 2, C)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

Describe how the Class A or Class B pathogen reduction requirement is met. For example, indicate what information was used and how it was evaluated to determine compliance.

(Do not submit daily data.)

Vector attraction reductions

Select the option/s by which vector attraction reduction was met: (For a detailed description of these options, see your Biosolids Manual or Minn. R. Chapter 7041.1400, subp. 2)

- ☐ A. 38% Volatile Solids Reduction (VSR)
- ☐ B. Bench Scale - Anaerobically Digested
- ☐ C. Bench Scale - Aerobically Digested
- ☐ D. SOUR Test: ≤ 1.5 mg oxygen/hour at 20 C
- ☐ E. Composted (aerobic/high temperature)
- ☐ F. Lime or Alkaline Stabilization
- ☐ G. Dried to 75% - for Stabilized Solids
- ☐ H. Dried to 90% - for Unstabilized Solids
- ☐ I. Injected
- ☐ J. Incorporated within six hours of application

For options A through H only, describe how the option was met. If VSR is calculated, indicate which equation was used, i.e. Van Kleeck.

Biosolids Analysis

	Sample #	Sample #	Sample #	Sample #	Sample #	Sample #	Average
Date/s of Sampling							
Date Sent to Lab							
Total Solids (%)							
Total Volatile Solids (%)							
Kjeldahl Nitrogen (%)							
Ammonia Nitrogen (%)							
Phosphorus (%)							
Potassium (%)							
pH							
Arsenic (mg/kg)							
Cadmium (mg/kg)							
Copper (mg/kg)							
Lead (mg/kg)							
Mercury (mg/kg)							
Molybdenum (mg/kg)							
Nickel (mg/kg)							
Selenium (mg/kg)							
Zinc (mg/kg)							

Parameter	Concentration (mg/kg)
Arsenic	38
Cadmium	43
Copper	2150
Lead	420
Mercury	28
Molybdenum	38
Nickel	210
Selenium	50
Zinc	3750

Greater sampling frequency

Compare your average biosolids values with those in the table on the left. List any parameters that have average values greater than the values in the table.

These parameters must be analyzed two times their minimum sampling frequency during **next year's cropping season**. Your minimum sampling frequency depends on the quantity of biosolids land applied.

Your minimum biosolids sampling frequency = _____

Two times minimum biosolids sampling frequency = _____

Site Specific Information

Site Code	(each site follows column down):			
	Landowner:			
	Actual Acreage Receiving Biosolids:			
	Crop Grown This Year:			
	Realistic Yield Goal (yield /acre):			
	Crop Grown Previous Year:			
	Soil Organic Matter*:			
	MANA Rate (lbs./acre):			
	Which Months Biosolids Were Land Applied:			

*Use last soil test taken for organic matter content. Soil testing is required once in the three-year time period prior to land application unless stipulated otherwise in a permit or site approval letter. If soil tests were required to be taken for this reporting year, complete the following:

Soil Test	Date Sampled:			
	Texture:			
	Organic Matter:			
	Phosphorus:			
	Potassium:			
	pH:			
	Soluble Salts:			

Application rates and methods:

Sample # or average used in following calculations:			
Gallons or wet tons applied per acre this year:			
Dry tons applied per acre this year:			
Method: Surface/Inject/Incorporate (0 to 48 hrs.):			

Nitrogen applied (pounds/acre)

Available nitrogen applied in biosolids this year:			
Carry-over nitrogen from 1 year ago:			
Carry-over nitrogen from 2 years ago:			
Nitrogen applied from other sources:			
Total nitrogen applied:			

Metals applied this year and cumulative (pounds/acre)

Concentration (mg/kg) X .002 X Dry tons/acre = pounds/acre of metal.

For cumulative metals, add all past metal loadings together.

Parameter	This Year	Cumulative	This Year	Cumulative	This Year	Cumulative
Arsenic						
Cadmium						
Copper						
Lead						
Mercury						
Molybdenum						
Nickel						
Selenium						
Zinc						

Certification Statements for managing biosolids

Statement #1: Certification that preparer has checked if site has reached cumulative pollutant loading rate

This certification statement is not included on the annual report form. Copies are found in Figure 12 of the Land Application of Biosolids manual (see Minn. R. ch. 7041.1000, subp. 2, item B, for the requirement and 7041.1600, subp. 3, item M, for the certification statement.) Keep these signed certification statements in your records, but you do not need to include them with the annual report.

Statement #2: Certification that a Type IV operator or inspector prepared the annual report

I certify that the attached forms were prepared by myself or under my supervision.

Signature of Type IV Certified Operator or Inspector

Date

Statement #3: Certification that pathogen reduction (for all facilities) and vector attraction reduction Options A through H (if chosen) were used — signed by biosolids preparer

Plain language: I have supervised preparing information that is used to determine if our biosolids program complies with the pathogen reduction and vector attraction reduction (VAR) requirements of the biosolids rules. Specifically, Item _____ *[insert one of items A through H — see page 1 of annual report for a list of options]* of Minn. R. ch. 7041.1400, subp. 2, was used to meet VAR requirements. In addition, those who gathered and evaluated this information are qualified to do so. I understand that I may be penalized for false certification.

Actual statement from rule: I certify, under penalty of law, that the information that will be used to determine compliance with the Pathogen Requirements in Minn. R. ch. 7041.1300, subp. 2, or 7041.1300, subp. 3, and the VAR requirement in _____ *[insert one of the vector attraction reduction requirements in Minn. R. ch. 7041.1400, subp. 2, A-H, if one of those requirements is met]* has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements (and vector attraction reduction requirements, if applicable) have been met. I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment.

Signature of Type IV Certified Operator or Inspector

Date

Statement #4: Certification that management practices and vector attraction reduction Options I or J (if chosen) were used — signed by biosolids applier

Plain language: I supervised preparing information that is used to determine if our biosolids program complies with the management practices, site restrictions and VAR requirements of the biosolids rules. Specifically, Item _____ *[insert I for injection or J for incorporating within 6 hours of application]* of Minn. R. ch. 7041.1400, subp. 2, was used to meet VAR requirements. In addition, those who gathered and evaluated this information are qualified to do so. I understand that I may be penalized for false certification.

Actual statement from rule: I certify, under penalty of law, that the information that will be used to determine compliance with the Management Practices in Minn. R. ch. 7041.1200, the Site Restrictions in Minn. R. ch. 7041.1300, subp. 3, item D, and the VAR requirement in _____ *[insert Minn. R. ch. 7041.1400, subp. 2, I or J, if applicable]* for each site on which bulk biosolids is applied has been prepared under my direction and supervision according to the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature of Type IV Certified Operator or Inspector

Date

Management practices were met by: (Check appropriate boxes for compliance descriptions, or if needed, add your own description. For example, *mineland reclamation may not follow all agricultural site practices, such as those for slope.*)

- ☐ Biosolids were applied on sites approved by the MPCA according to Minn. R. ch. 7041.0800.
☐ Biosolids were applied according to the soil, slope, and separation distance requirements of Minn. R. ch. 7041.1200.

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- ☐ A detailed description of how agronomic rate requirements were met is on page 3 of this Annual Report.
☐ The farmer was notified of the applicable site restrictions for harvesting crops, grazing and public access.