

Annual Land Application Report Compliance Requirements Handout Version 12/2024

The Wisconsin Department of Natural Resources (department) has identified common compliance issues associated with the “Annual Land Application Report” (form number 3400-055). Per sub. NR 113.11(3), Wis. Adm. Code a complete and accurate report must be submitted and certified by January 31, following the calendar year in which the land application of septage occurs (businesses that landspread septage).

Three items that operators are not consistently nor accurately recording in this report include the following:

1. **Annual Agronomic Rate (Nitrogen)**. Annual nitrogen application rate in pounds per acre must be reported on the Annual Land Application Report per subd. NR 113.11(3)(a)3., Wis. Adm. Code. The amount of nitrogen applied per acre for each field must be calculated and reported as follows and reported under the “N supplied from waste (lbs/acre)” column of the Annual Land Application Report.

Calculation: Gallons of septage applied per acre X 0.0026 = lbs N /acre

Example: Smith Pumping LLC landspread 120,000 gallons of septage waste on 10 acres during the 2024 crop year on DNR# 12345 (site/field: 1-1).

$$\text{Step 1: } \frac{120,000 \text{ (gallons of septage)}}{10 \text{ (acres of landspread)}} = 12,000 \text{ gal/acre}$$

$$\text{Step 2: } 12,000 \text{ gal/acre} \times 0.0026 = 31.2 \text{ lbs./acre of nitrogen}$$

- Reported value on the Annual Land Application Report (3400-55 form) for DNR# 12345 is **31.0 lbs./acre nitrogen**.

Figure below displays the portion of the Annual Land Application Report (form 3400-055) where the septage business enters “N Supplied from Waste (lbs/acre).”

Total Municipal Sludge Generated:							
Total Municipal Sludge Land Applied:					Metric Tons		
If septage, check how pathogen and vector control requirements were satisfied (check all that apply): <input type="checkbox"/> Injection <input type="checkbox"/> Incorporation <input type="checkbox"/> pH Adjustment							
s	N supplied from waste (lbs/acre)	Other Sources of N (lbs/acre)	Crop Code	Crop Year	Nitrogen Rec. (lbs/acre)	Method	Chlorides Applied (lbs/acre)
			48	2018		INC	
			48	2018		INC	

2. **Other Sources of Nitrogen**. Other sources of nitrogen (examples: manure and commercial fertilizer) must be reported on the Annual Land Application Report per subd. NR 113.11(3)(a)3m.,

Wis. Adm. Code. This requires the business to communicate with the property owner and/or farmer and determine what, if any, additional nitrogen was applied to the field during the crop year and report it on the Annual Land Application Report. If no other sources of nitrogen are supplied, then the business should report “0” (instead of leaving this column blank). The added nitrogen applied to the crop must be reported under the “Other Sources of N (lbs/acre)” column of the Annual Land Application Report.

Example: Smith Pumping LLC landspread septage on DNR# 12345 (site/field: 1-1). Prior to landspreading septage, Smith Pumping LLC talks to the property owner (Dan Brown) to identify if any manure or commercial fertilizer has been landspread during the current crop year. Mr. Brown indicated that ~50 pounds Nitrogen/acre of commercial fertilizer has been applied to field 1-1 during the 2024 crop year. Smith Pumping LLC then landspreads on this field. At the end of the year, Smith Pumping LLC talks with Mr. Brown to determine if any other nitrogen has been applied to field 1-1. During this conversation Smith Pumping LLC advises Mr. Brown of the Nitrogen supplied from their septage applications. Mr. Brown has not applied any additional fertilizer or manure during the 2024 crop year. **Smith Pumping LLC reports “50 lbs/acre nitrogen” under the “Other Sources of N (lbs/acre)” column of the Annual Land Application Report (3400-053 form).**

Figure below displays the portion of the Annual Land Application Report (form 3400-055) where the septage business enters “Other Sources of N (lbs/acre).”

Total Municipal Sludge Generated:		Total Municipal Sludge Land Applied:		Metric Tons			
If septage, check how pathogen and vector control requirements were satisfied (check all that apply): <input type="checkbox"/> Injection <input type="checkbox"/> Incorporation <input type="checkbox"/> pH Adjustment							
s	N supplied from waste (lbs/acre)	Other Sources of N (lbs/acre)	Crop Code	Crop Year	Nitrogen Rec. (lbs/acre)	Method	Chlorides Applied (lbs/acre)
			48	2018		INC	
			48	2018		INC	

3. **Nitrogen Recommended.** The yearly nitrogen requirement for each crop must be reported on the Annual Land Application Report per subd. NR 113.11(3)(a)2., Wis. Adm. Code. Businesses should reference the UW Extension A2809 “Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin.” This information is reported under the “Nitrogen Rec. (lbs/acre)” column of the Annual Land Application Report.

Example: Smith Pumping LLC landspread septage on DNR# 12345 (site/field: 1-1). The intended crop for field 1-1 is grass (hay). Previous soil nutrient tests for field 1-1 have confirmed a soil organic matter content of ~4%. When referring to the UW Extension A2809 Table 6.3, Smith Pumping LLC identifies that this field may receive up to 130 pounds N/acre. **Smith Pumping LLC reports “130 lbs/acre nitrogen” under the “Nitrogen Rec. (lbs/acre)” column of the Annual Land Application Report (3400-053 form).**

Figure below displays a portion of Table 6.3 from the UW Extension A2809 for the nitrogen rate guidelines for grass (hay).

Crop	Yield range per acre	Soil organic matter content (%)			
		< 2.0	2.0–9.9	10.0–20.0	> 20.0
-----lb N/a to apply ³ -----					
Grass, hay ^g	0.5–8 ton	160	130	100	50
Grass, sod for turf, establishment ^h	all	250	250	250	250

Figure below displays the portion of the Annual Land Application Report (form 3400-055) where the septage business enters “Nitrogen Rec. (lbs/acre).”

Total Municipal Sludge Generated:

Total Municipal Sludge Land Applied: Metric Tons

If septage, check how pathogen and vector control requirements were satisfied (check all that apply): ☐ Injection ☐ Incorporation ☐ pH Adjustment

s	N supplied from waste (lbs/acre)	Other Sources of N (lbs/acre)	Crop Code	Crop Year	Nitrogen Rec. (lbs/acre)	Method	Chlorides Applied (lbs/acre)
			48	2018		INC	
			48	2018		INC	

The completed Annual Land Application Report (3400-053 form) from scenarios above should look like the following:

DNR #	Fac Site# /Field #	Landowner	Acres Land Applied	Outfall No. *	Amount of Waste Applied	Units	N supplied from waste (lbs/acre)	Other Sources of N (lbs/acre)	Crop Code	Crop Year	Nitrogen Rec. (lbs/acre)	Method
12345	1-1	Dan Brown	10	990	120000	Gal	31	50	84	2024	130	s

Helpful Resources:

1. Switchboard assistance: <https://www.surveymonkey.com/r/SwitchboardHelp>
2. Septage Business Webpage: <https://dnr.wisconsin.gov/topic/opcert/septageBusiness.html>
3. Septage Operator Webpage: <https://dnr.wisconsin.gov/topic/opcert/septage.html>
4. UW Extension A2809 <https://learningstore.extension.wisc.edu/products/nutrient-application-guidelines-for-field-vegetable-and-fruit-crops-in-wisconsin-p185>