___ Aug. ____R.O.

Maine Department of Environmental Protection

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WASTEWATER TREATMENT PLANT SLUDGE UTILIZATION REPORT YEAR

GENERATOR INFORMATION

Name of Generator:

Address:

Contact Person:

Program Approval License: S-

E-mail:

Phone#:

SLUDGE PRODUCTION AND UTILIZATION SUMMARY

Complete ALL the following items. If the amount of any item is zero, please write 0.

REPORT AMOUNTS IN	☐ WET TONS	☐ DRY TONS	☐ CUBIC YARDS	☐ GALLONS -- **PLEASE SPECIFY**

1. Total sludge land applied in Report Year, in Maine, from sludge produced in Report Year

2. Total sludge delivered to compost facility in Report Year, in Maine, from sludge produced in Report Year

   Name/Loc. of Compost Facility

3. Total sludge landfilled in Report Year, in Maine, from sludge produced in Report Year

   Name/Loc. of Landfill

4. Total sludge stockpiled in Report Year, in Maine, produced in Report Year and **not** land applied in Report Year (do not include stockpiling on-site at the generator's treatment facility)

5. Total sludge shipped out-of-state in Report Year from sludge produced in Report Year

   OUT-OF-STATE LOCATION USE

6. Total sludge for other use in Report Year from sludge produced in Report Year

   Specify Use and Location

7. **Total sludge produced in Report Year (TOTAL ITEMS 1 through 6, above)**

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8. Total sludge land applied in Report Year, in Maine, from sludge stockpiled in prior years (do not include sludge stockpiled on-site at generator's treatment facility)

9. Total sludge delivered to compost facility, in Maine, in Report Year from sludge stockpiled in prior year

   Name/Loc. of Compost Facility

10. Total sludge landfilled, in Maine, in Report Year from sludge stockpiled in prior year

    Name/Loc. of Landfill

11. Total sludge stockpiled, in Maine, in Report Year from sludge stockpiled in prior year (do not include sludge stockpiled on-site at generator's treatment facility)

12. Total sludge shipped out-of-state in Report Year from sludge stockpiled in prior years

    OUT-OF-STATE LOCATION USE

13. Total sludge for other use in Report Year from sludge stockpiled in prior years
    SPECIFY USE / DISPOSAL

14. **Total sludge from prior year used in Report Year (SUM OF ITEMS 8 through 13, above)** >>>

15. **S oil Nutrient analysis information**: Prior to land application, soil nutrient analysis must be performed for each site upon which sludge will be land applied. Complete the attached nutrient analysis and field utilization worksheet for each site upon which sludge was land applied in Report Year. Tabulate data for each soil sample unit. Use additional sheets if necessary.

☐ Check here if question 15 is not applicable. Explain why not applicable

16. **Sludge analysis summary**: Complete the attached sludge analysis summary for all analyses performed in Report Year. Use additional sheets if necessary.

☐ Check here if question 16 is not applicable. Explain why not applicable

17. **Heavy Metal Analysis Results**: Did any heavy metal analyses parameter exceed standards in Table 419.3?

☐ No
☐ Yes >>> Attach the heavy metal loading rate calculations performed to meet the requirements of Chapter 419, Section 4.J(4)(a), and the soil analysis for heavy metals pursuant to Chapter 419, Section 4.J(5)(a).

18. **Other Analyses**: Attach target compound, PCB, and/or pesticide analyses which were not sent to the Dept. in Report Year.

☐ Check here if question 18 is not applicable. Explain why not applicable

19. **Other Analyses Results**: Did any of the target compounds, PCB, and/or pesticide analyses results exceed the standards contained in Chapter 418, Appendix A?

☐ Not Applicable
☐ No
☐ Yes >>> Attach loading rate calculations performed in accordance with Chapter 419, Appendix A.

20. **Dioxin Analysis**: Attach dioxin analyses which were not sent to the Department in Report Year.

☐ Check here if question 20 is not applicable. Explain why not applicable

21. **Dioxin Analyses Results**: Did any of the dioxin results exceed 27 ppt total 2378 TCDD equivalents?

☐ Not Applicable
☐ No
☐ Yes >>> Was the residual land applied?
  ☐ No
  ☐ Yes >>> Was the residual land applied in accordance with the standards in Chapter 419, Section 4.K?
    ☐ Yes
    ☐ No >>> Attach explanation.

22. **Residual Nitrogen Calculations**: Attach worksheets indicating the amount of nitrogen available in Report Year from sludge land applied over each of the previous three years (i.e. Available Nitrogen from mineralization of residual Organic Nitrogen).

☐ Check here if question 22 is not applicable. Explain why not applicable

23. **Nitrogen Loading Rate Calculation**: Attach nitrogen loading rate calculation worksheets which you used to calculate the specific loading rate for sludge utilization during spreading in Report Year.

☐ Check here if question 23 is not applicable. Explain why not applicable

24. **Pathogen Reduction**: Indicate the method of pathogen reduction:

☐ **Alkali-stabilization** (sufficient alkali added to sludge to achieve pH 12 after two hours contact)
☐ **Other**. Describe method

25. **Vector Attraction Reduction**: Indicate the method of vector attraction reduction:

☐ **Alkali** (pH of sludge is raised to 12 or higher and, without addition of more alkali, remains at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours).
☐ **Other**. Describe method

26. **Restrictions**: Chapter 419, section 4.I (2) outlines the restrictions on growing food, feed, and fiber crops at a site where type II sludge has been land applied. The section also outlines restrictions on allowing domestic animals to graze, harvesting turf, and mining topsoil at these sites.

Have the above restrictions been met at all sludge land application sites?

☐ Yes
☐ No >>> Please explain

27. **Site Monitoring Information**: Do you have soil / groundwater / other monitoring information available for any of your licensed sites, which was not reported on previous annual reports?

☐ No
☐ Yes >>> Attach monitoring information.

28. **Spreading on Restricted Soils**:

A. Did you land apply sludge on soils with a depth-to-bedrock fewer than twenty (20) inches?
☐ No
☐ Yes >>> Was sludge spread on these sites, in Report Year, prior to September 15th ?
☐ Yes
☐ No >>> Please attach a list of sites.

B. Did you land apply sludge when the water table was at least fifteen (15) inches below the ground surface?
☐ No >>> Attach an explanation
☐ Yes >>> Attach an explanation of how you determined that the water table standard was met.

29. **Storage Information**:

A. Current Storage. Sludge stored at field stacking sites in Report Year, but not land applied in Report Year.

☐ Check here if no sludge stored in Report Year. If you did have sludge stored in Report Year, complete information below:

DEP License: S-	Amount stored	Date
DEP License: S-	Amount stored	Date
DEP License: S-	Amount stored	Date

B. Proposed Storage

Do you anticipate stockpiling sludge at any field stacking sites, prior to the Report Year spreading season, not listed above?
☐ No
☐ Yes >>> Please list:
DEP License: S- DEP License: S-

C. Storage Limits

Sludge may not be placed at a field stacking site licensed under Chapter 419 in excess of 240 days. Do you anticipate that sludge at any of the above listed locations will be stored in excess of 240 days?

☐ No ☐ Yes

D. Access Restrictions

Chapter 419, section 10.B, requires that the public must be restricted at all sludge storage sites by, at minimum, placing signs at access points to indicate that access is restricted to authorized personnel only. Have signs been placed at storage sites to inform the public of access restrictions?

☐ No ☐ Yes

E. Storage Site Inspection

Chapter 419, section 13.A(11) requires that all storage sites must be inspected at least once per year, and that the licensee must record the condition of the facility, repairs required, and repairs performed. All storage sites inspected in Report Year?

☐ No ☐ Yes >>> Attach inspection reports.

F. Storage Site Operating Standards

☐ Check here if you had no stockpiles sites in use in Report Year, and skip items (1)-(6) below.

If you did field-stack sludge in Report Year, please complete the following:

(1) Soil has a maximum permeability of 2.0 inches per hour, as determined by a Maine Certified Soil Scientist.
☐ Yes
☐ No >>> Attach explanation

(2) Sludge stockpiled on soil with permeability of 0.6 to 2.0 inches per hour was underlain with a geomembrane or absorbent material, or covered with a tarp.
☐ Yes
☐ No >>> Attach explanation

(3) Sludge stored for 30 days, or fewer, was placed on soil with a minimum 30-inches to bedrock, with the depth-to-bedrock verified by field investigation.
☐ Yes
☐ No >>> Attach explanation, and list of sites

(4) Sludge stored for greater than 30 days was placed on soil with a minimum of 40-inches to bedrock, with the depth-to-bedrock verified by field investigation.
☐ Yes
☐ No >>> Attach explanation, and list of sites

(5) Depth to water table, while sludge was stockpiled, was 24 inches or greater
☐ No
☐ Yes >>> Attach explanation of how you determined depth-to-water table.

(6) Sludge stockpile areas must be harrowed and re-seeded, as necessary, to sustain a groundcover that will scavenge excess nitrogen from the soil in the area where sludge was stockpiled. Did you perform the necessary harrowing and re-seeding at all stockpile sites:
☐ Yes ☐ No >>> Attach explanation

30. **Buffer Inspections.** Chapter 419 requires that all buffer areas must be inspected prior to spreading. All areas of a buffer that show evidence of erosion or channeled flow must be repaired. Please attach copies of records of buffer inspections performed in Report Year. The records must show: DEP license number for the site, date of inspection, inspector's name, results of the inspection, and repairs made to the buffer as a result of the inspection.

31. **Analyses Certified.** Maine law, 22 MRSA §567, requires that sample analysis and reporting for Department of Environmental Protection programs must be performed by a Maine-certified laboratory.

Were all sample analyses performed by a Maine-certified laboratory? ☐ Yes ☐ No >>>> Attach explanation.

32. **Modifications to Operation.** Are there any modifications to the operation of your spreading program, or particular spreading sites, which have not been approved by the DEP with a license modification?

☐ No
☐ Yes >>> As a separate attachment, please list the DEP license number for the site(s) at which operations have been modified, and a description of the modifications. Please note that modifications may require submittal of an application for a minor modification or amendment to the DEP license, as described in Chapter 400, Section 3.B(2).

33. **License Surrender.** Sludge site licensees may surrender a sludge utilization license. Do you wish to surrender any sludge utilization site licenses?

☐ No
☐ Yes >>> Submit a license surrender request for each license.

CERTIFICATION

☐ ***By checking this box and entering your name;*** *I certify under penalty of law that I have personally examined and am familiar with the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

Signature: Date:

Wastewater Treatment Plant Sludge Utilization Report Year

Generator Name_

SLUDGE SAMPLE ANALYSES TABULATION - Report Year ANALYSES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**AVG.**
pH													
T.S. %													
TVS %													
TKN													
NH_4N %													
NO_3N %													
Org. N													
Total Carbon %													
Ca (mg/kg dw)													
Cl (mg/kg dw)													
Mg (mg/kg dw)													
K (mg/kg dw)													
Na (mg/kg dw)													
P (mg/kg dw)													
Fe (mg/kg dw)													
As (mg/kg dw)													
Cd (mg/kg dw)													
Cr (mg/kg dw)													
Cu (mg/kg dw)													
Hg (mg/kg dw)													
Mo (mg/kg dw)													
Ni (mg/kg dw)													
Pb (mg/kg dw)													
Se (mg/kg dw)													
Zn (mg/kg dw)													

Wastewater Treatment Plant Sludge Utilization Report Year

Generator Name_

SOIL NUTRIENT ANALYSIS
and
Report Year FIELD UTILIZATION WORKSHEET

DEP License	Field ID	Acres Utilized	Crop Type	Crop Harvest Date	Soil Sample Date	Soil pH[1]	Soil K (% sat.)[2]	Soil Mg (% t.)[3]	Soil P (lbs/ac)	Max. Applic. Rate in lbs. of N per acre[4]	Avail. lbs. of N/ acre From Sources Other Than Sludge[5]	Vol. of **Sludge** Required for Field Acres Utilized[6]	Total Volume of **Sludge** Applied[7]	Date(s) **Sludge** Applied	(x) if site is subject to seasonal limits[8]	# Days Sludge Field Stored Before Appl.

[1] pH cannot exceed 7.5
[2] If pH is > 6.5, then base saturation of Potassium must be at least 2.5%
[3] If pH is > 6.5, then base saturation of Magnesium must be at least 10%.
[4] Maximum allowed based on crop nutrient needs, **with required reductions due to soil restrictions, license conditions, etc.**
[5] Pounds of Available Nitrogen per Acre at the utilization area provided by manure, other fertilizers, N carryover from previous years, etc.
[6] Volume of sludge (specify units) required to provide maximum allowed loading rate of nitrogen, minus N already available from other sources
[7] Volume of sludge (specify units) actually applied to the field.
[8] Soil that is derived from outwash or stratified drift, or is <20" to bedrock must be spread after the water table drops to 15" and before September 15th.

ANFISH – REVISED 12/11/20