

MA DEP Regulation of Sewage Sludge Land Application (310 CMR 32)

by NEBRA 2012, from tables created by New England Interstate Water Pollution Control Commission (NEIWPCC)
 "Official state guidance/regulations should be consulted for full information. This chart is not intended as a substitute."

LAND APPLICATION OF CLASS A (TYPE I) WASTEWATER RESIDUALS

Guidance / Regulation Spreadsheet

	EPA	MA ¹
	Current	Current
General Information		
Generator Permit Required	Yes	Yes
Site Permit Required	No	No
Local Approval	No	Yes
Public Notice	Yes	No
Public Hearing	Possible	Discretionary
Abutter Notification	No	No
Permit Term (yrs)	5 yrs	2 yrs
Permit Fees (\$)	No	Yes
Recordkeeping	-	Yes
Recordkeeping-Post-closure	5 yrs	3 yrs
Additional Testing	Possible	Possible
Inspection and Entry	Yes	Yes
Access Controls		
Animal Grazing (days)	No	No
Public Access (days)	No	No
Endangered Species	No	No
Food Crop Limit. (months)	No	No
Feed Crop Limit. (months)	No	No
Seasonal Restrictions		
Frozen soil	N/A	N/A
Wet Soil	N/A	N/A
Flooded	N/A	N/A
High Water Table	N/A	N/A
Rainfall	N/A	N/A
Stockpiling/Storage		
Time Limit	N/A	42 days
Setbacks	N/A	Yes
Quantity	N/A	N/A
Site Restrictions	N/A	Yes
Depth to Groundwater		4 ft.

	Current	Current
Other		
Odor Control	No	Possible
Vector control	Yes	No
Pathogen Reduction	Yes	Yes
pH	Possible	N/A
Run-off/Run-on Controls	Possible	No
Transportation		Yes
Site Characteristics		
Topography/Slope	N/A	N/A
Permeability (" /hr)	N/A	N/A
Area	N/A	N/A
Soil Analysis		N/A
Soil Type	N/A	N/A
Depth to Water Table	N/A	N/A
Vegetative Cover	N/A	N/A
Depth to Bedrock	N/A	N/A
Land Use Type		
Agricultural	Yes	Yes
Forest	Yes	Yes
Public Contact	Yes	Yes
Reclamation	Yes	Yes
Lawn or Home Garden	Yes	Yes
Landfill Cover		Yes
Other		
Monitoring Requirements		
Soil Monitoring (#/acre/yr)	N/A	N/A
GW Monitoring (#/yr)	N/A	N/A
Sludge Monitoring (#/yr)	1 - 12/yr	1-12/yr
Sample Type	Composite	Composite
% Solids		N/A
Incoming Sample Required	No	No
Outgoing Sample Required	Yes	Yes

Buffers/Setbacks (ft)	N/A	N/A
------------------------------	-----	-----

Metals	EPA	MA
	Current	Current
Arsenic (mg/kg)	41 ⁷	N/A
Barium (mg/kg)	N/A	-
Boron(mg/kg)	N/A	300
Cadmium(mg/kg)	39 ⁷	14
Chromium(mg/kg)	N/A	1000
Copper(mg/kg)	1500 ⁷	1000
Lead(mg/kg)	300 ⁷	300
Mercury(mg/kg)	17 ⁷	10
Molybdenum(mg/kg)	N/A	10/25 ⁸
Nickel(mg/kg)	420 ⁷	200
Nitrogen(mg/kg)	N/A	N/A ⁹
Pesticides (mg/kg)	N/A	N/A
Selenium(mg/kg)	100	N/A
Zinc(mg/kg)	2800 ⁷	2500
PCBs (ppm)	N/A	2/1 ¹⁰
Dioxin (ppt)	N/A	N/A
Pathogens	Class A	PFRP
Other Tests		TCLP every 2 yrs.

¹Type 1.

²Class A.

³Erosion Controls are required.

⁴Use of the product.

⁵The producing facility.

⁶When slope is greater than 3%, erosion controls are required.

⁷Table 3 of §503.13 - Pollutant Concentrations (Exceptional Quality).

⁸10 mg/kg if sludge is applied to land utilized for grazing on or land upon which one or more forage crops are intended to be grown. Otherwise, 25 mg/kg.

⁹Cannot exceed agronomic rate.

¹⁰2.0 mg/kg for a commercial fertilizer, 1.0 mg/kg for a soil conditioner.

¹¹Class I.

¹²Class II.

¹³Pesticide:

Endrin	0.1 mg/kg
Aldrin/Dieldrin	0.006 mg/kg
DDD	0.1 mg/kg
DDE	0.1 mg/kg
DDT	0.1 mg/kg
2,4,5-T	0.1 mg/kg
2,4,5-TP Silver	0.1 mg/kg

¹⁴For distribution site only.

¹⁵Applicant can choose either to issue a general public notice or notify land abutters directly.

¹⁶AAP= Vermont acceptable agricultural practices.

¹⁷Original treatment/storage facility only. not regulated after change of ownership or land applied.

¹⁸Vermont requires nitrogen testing for labeling biosolids for distribution and marketing.

¹⁹7 days, after which the stockpiling must be covered with an odor control material

²⁰public roads other than federal interstate highways/federal interstate highways

²¹sludge/low-metal sludge

"Official state guidance/regulations should be consulted for full information. This chart is not intended as a substitute."

LAND APPLICATION OF CLASS B (TYPE II) WASTEWATER RESIDUALS

Guidance / Regulation Spreadsheet

	EPA	MA ²
General Information		
Generator Permit Required	Yes	Yes
Site Permit Required	No	No
Local Approval	No	Yes
Public Notice	Yes	No
Public Hearing	Possible	No
Abutter Notification	In Plan	No
Permit Term (yrs)	5 yrs	1 year
Permit Fees (\$)	No	Yes
Recordkeeping		Yes
Recordkeeping-Post-closure	5 yrs to Infinity	3 yrs.
Additional Testing	Potential	5 yrs
Inspection and Entry	Yes	Yes
Access Controls		
Animal Grazing (days)	Class B- 30 days	PSRP – 30 days
Public Access	30 days - 1 yr.	PSRP – 30 days
Endangered Species	Yes	N/A
Food Crop Limit. (months)	1 - 38 Months	24 Months
Feed Crop Limit. (months)	1 Month	1 Month
Seasonal Restrictions		
Frozen soil	3	Prohibited
Wet Soil	N/A	Prohibited
Flooded	3	Prohibited
High Water Table	N/A	Saturated
Rainfall	N/A	Prohibited

	EPA	MA ²
Stockpiling/Storage		
Time Limit	N/A	N/A
Setbacks	N/A	Yes
Quantity	N/A	N/A
Site Restrictions	N/A	Yes
Other		
Odor Control	N/A	No
Vector control	Yes	No
Pathogen Reduction	Yes	Yes
pH	Possible	Soil - 6.5
Run-off/Run-on Controls	Possible	Yes
Transport Requirements	No	Yes
Site Characteristics		
Topography/Slope	N/A	up to 8%
Permeability ("hr)	N/A	N/A
Area	N/A	N/A
Soil Analysis		Yes
Soil Type	N/A	Yes
Depth to Water Table	N/A	3.0 ft
Vegetative Cover	N/A	N/A
Depth to Bedrock	N/A	3.0 ft
Land Use Type		
Agricultural	Yes	Yes
Forest	Yes	Yes
Public Contact	Yes	Restricted
Reclamation	Yes	Yes
Lawn	No	No
Other		N/A
Garden		No
Monitoring Requirements		
Soil Monitoring (#/acre/yr)	N/A	Yearly
GW Monitoring (#/yr)	N/A	Possible
Sludge Monitoring (#/yr)	1 - 12	1 – 12
Sample Type	Composite	Composite
% Solids		N/A
Mineralization		No

	EPA	MA ²
Buffers/Setbacks (ft)		
Surface Water	30	Discretionary
Public Water Supply wells	N/A	1/2 mile
Private Water supply wells	N/A	300 ft
On-site/Off-site Dwellings	N/A	N/A
Property Lines	N/A	N/A
Public Roads	N/A	N/A
Drainage Swale	30	Yes
Floodplain	N/A	N/A
Wetlands	30	100 ft
Public Areas	N/A	N/A
Sinkholes	N/A	N/A
	Current	Current/Propose
Max. Concentration		
Arsenic (mg/kg)	75 ⁹	N/A
Boron(mg/kg)	N/A	300
Cadmium(mg/kg)	85 ⁹	25
Chromium(mg/kg)	N/A	1000
Copper(mg/kg)	4300 ⁹	1000
Lead(mg/kg)	840 ⁹	1000
Mercury(mg/kg)	57 ⁹	10
Molybdenum(mg/kg)	75 ⁹	10/25 ¹³
Nickel(mg/kg)	420 ⁹	200
Nitrogen(mg/kg)	N/A ¹⁰	N/A ¹⁰
Selenium(mg/kg)	100 ⁹	N/A
Zinc(mg/kg)	7500 ⁹	2500
PCBs(mg/kg)	N/A ¹²	10
Dioxin (ppt)		N/A
Other Tests		TCLP every 2 yrs.

¹Marketing and distributing of biosolids products (one time application).

²Type 2 numbers used. Type 3 - Concentrations exceed any limit for Type 2, cannot be used for food chain crops and site must be recorded in the Registry of Deeds.

³The sludge cannot be applied to frozen, snow-covered or flooded land such that it enters a surface water.

⁴ME only licenses compost facilities, not sites where compost is used. Class B utilization requires a site license.

⁶Or Other Involved party (hauler, farmer) can hold permit.

⁷When slope is greater than 3%, erosion controls are required.

⁸Slope <15%. If sludge <20% total solids, slope must be 8% unless subsurface injection is used.

⁹Table 1 of §503.13 - Ceiling Concentrations.

¹⁰Agronomic rate application requirements cover nitrogen.

¹¹Bathing or drinking 100 ft.

¹²Sludges with PCB's above 50 mg/kg are not regulated under §503.

¹³10.0 mg/kg if applied to land utilized for grazing or on land upon which one or more forage crops are intended to be grown. Otherwise, 25.0 mg/kg.

¹⁴<27 ppt - No Management Restrictions, 27 - 250 ppt - Site Management Restrictions, >250 ppt - Prohibited Use.

¹⁵WHPA = Wellhead Protection Area.

¹⁶Must test for nitrogen but there is no standard.

¹⁷Pesticides: Endrin 0.1 mg/kg
Toxaphene 0.1 mg/kg
2,4,5-T 0.1 mg/kg
2,4,5-TP Silver 0.1 mg/kg

¹⁸Applicant can choose either to issue a general public notice or notify land abutters directly.

"Official state guidance/regulations should be consulted for full information. This chart is not intended as a substitute."