



## COMPARISON OF STATE AND FEDERAL REGULATORY REQUIREMENTS FOR LAND APPLICATION OF BIOSOLIDS

2009

Regulation	State (Env-Wq 800)		Federal (40 CFR Part 503)	
Pathogen Reduction	State requirements based on federal rule		Establishes standards for pathogen reduction	
Vector Attraction Reduction (VAR)	Uses federal VAR standards, but does not allow VAR at land application sites		Establishes standards for VAR	
Metals Standards	Regulates 14 metals		Regulates 9 metals	
	Limit (mg/kg)	Loading (kg/ha)	Limit (mg/kg)	Loading (kg/ha)
Arsenic	32	10	75	41
Cadmium	14	5	85	39
Chromium	1000	300	Not regulated	Not regulated
Copper	1500	300	4300	1500
Lead	300	200	840	300
Mercury	10	5.6	57	17
Molybdenum	35	18	75	Not regulated
Nickel	200	89.3	420	420
Selenium	28	100	100	100
Zinc	2500	500	7500	2800
Antimony	26 <sup>(1)</sup>	Not regulated	Not regulated	Not regulated
Beryllium	0.95 <sup>(1)</sup>	Not regulated	Not regulated	Not regulated
Silver	200 <sup>(1)</sup>	Not regulated	Not regulated	Not regulated
Thallium	21 <sup>(1)</sup>	Not regulated	Not regulated	Not regulated
Organic Chemicals	Regulates 155 organic contaminants including dioxins and PCBs		Not regulated	
Testing and Evaluation of Sludge Quality	Requires Sludge Quality Certification (DES approval) <ul style="list-style-type: none"> <li>• Prior to certification, 4 tests, 60 days apart for 177 analytes</li> <li>• After certification, Ongoing testing for 177 analytes</li> </ul>		No prior evaluation or approval required, testing for 9 metals 1 to 12 times per year	
Site Permits	Site Permit required for land application at a specific location		No site specific permit required	
Class B, Land application setback	Wells Property line Surface water Dwellings Roads Bedrock/Groundwater		10-meter setback from waters of the United States	
Transportation	Regulates the transportation of Class B and untreated sludge		Not regulated	
Facility Permit	Requires facilities permits for the storage and/or the treatment of sludge not associated with an NPDES permit		Not regulated	
Management of industrial sludge and water treatment sludge	Regulates the removal, transportation, and disposal of these materials		Not regulated	
Regulatory Oversight	5 staff in Concord		1 part-time regulator in Boston	

(1) – The limits for antimony, beryllium, silver, and thallium are guidance values.