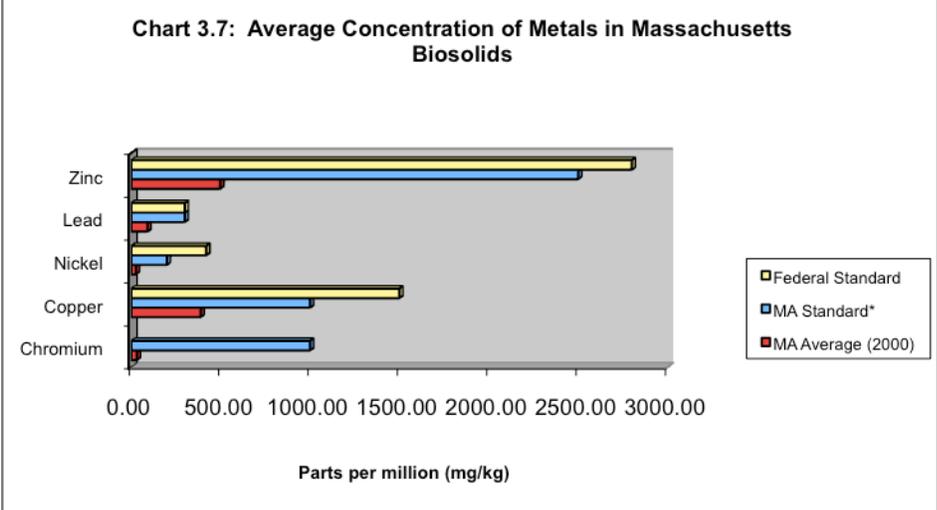
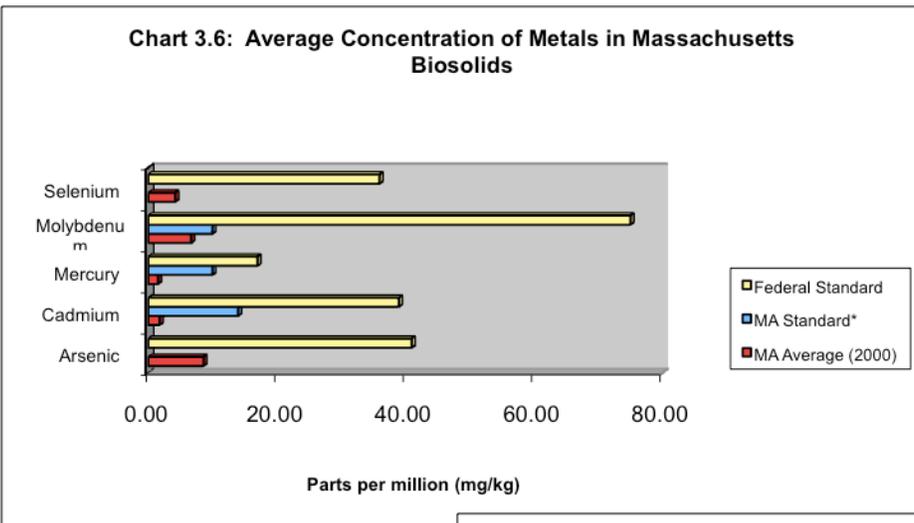


Biosolids Recycling in Massachusetts (2000 information from "Saving Soil", updated May 2012)

Massachusetts recycles about 35% of the sewage sludge produced in the state--almost all of it as Class A (Type 1) material. The largest recycler is the Boston area Massachusetts Water Resources Authority (MWRA), which produces a Class A heat dried pellet fertilizer biosolids product; Greater Lawrence Sanitary District (GLSD) does the same. MWRA recycles 100% of its biosolids and accounts for 12% of the state's sewage sludge. Successful compost operations, which treat about 5% of the state's sewage sludge, are found in Dartmouth, Mansfield, Marlborough, Nantucket, Newbury, Pepperell, Southbridge, and Williamstown. There is virtually no land application of Class B (Type II) biosolids.

Massachusetts has written policy commitments to increasing biosolids recycling rates and reducing the toxicity of the waste-stream to further encourage biosolids recycling. However, investments in infrastructure made during the 1980s have committed many of the Commonwealth's communities (e.g. Worcester) to incineration (or landfilling) of sewage sludge. In addition, Massachusetts has a dense population and a low percentage of farm land.

Greater sewage sludge recycling may be possible in Massachusetts with composting and other advanced treatment programs, especially if state regulations can be further adapted to stimulate the development of such programs. For 15 years, there has been on-and-off Department of Environmental Protection consideration of updating the 310 CMR 32 sludge regulations. The successful start-up in the early 2000s of the Marlborough mixed solid waste and biosolids co-composting facility and the GLSD anaerobic digestion and Class A pellet fertilizer production were encouraging biosolids recycling developments. However, there has been little advancement in biosolids recycling in the Commonwealth in recent years.



*MA lowest "Type 1 Sludge" standards, regulations Table 32.12(2)(a).

NOTE: The state and federal limits shown for comparison are the strictest standards.

Biosolids Use and Disposal Summary (2004 data)

	Number of Entities (TWTDS & Sep. Preparers) Going To...	Quantity of Biosolids	Percentage (quantity)	NOTES:
Beneficial Use	17	53,513	35%	This is one facility that reports storage in a lagoon; there may be other small facilities doing this as well.
Disposal	110	99,146	65%	
Other	1	576	0%	
Total	128	153,235	100%	
Beneficial Use				
	Number of Entities (TWTDS & Sep. Preparers) Going To...	Quantity of Biosolids	Percentage (quantity)	NOTES:
Agricultural	2	587	0%	In addition to the separate preparers listed in the note above and the products they produce, the Class A EQ distribution here includes utilities that compost their own biosolids, including as Billerica, Dartmouth, Mansfield, Pepperell, and Williamstown.
Forestland	0	-	0%	
Reclamation	0	-	0%	
Class A EQ Distribution	15	52,926	35%	
Total	17	53,513	35%	
Long-term storage	1	576	0%	
Disposal				
	Number of Entities (TWTDS & Sep. Preparers) Going To...	Quantity of Biosolids	Percentage (quantity)	NOTES:
MSW landfill (incl dly cvr)	21	41,588	27%	60% of the landfilled quantity is landfilled out of state. MA incinerators are located at the following TWTDS: Brockton, Fall River, Fitchburg, Lynn, and Upper Blackstone (Worcester area). Some MA TWTDS send solids to incinerators in RI and CT.
Surface Disposal	0	-	0%	
Incineration	89	57,558	38%	
Total	110	99,146	65%	

From NEBRA, 2007: *A National Biosolids Regulation, Quality, End Use & Disposal Survey*. Download at www.nbiosolids.org