



## Meeting the Highest Quality Standards

After many years of research and one of the most comprehensive risk assessments it ever performed, the U.S. Environmental Protection Agency developed regulations that strictly limit the amount of metals biosolids fertilizers may contain. These limits are designed to be highly protective of human health and the environment.

Bay State Fertilizer is sampled daily and analyzed to determine compliance with state and federal regulations. By meeting the strictest federal standards, Bay State Fertilizer is approved for use in lawns and gardens, as well as in commercial agriculture.



The table below shows regulated metals and average concentrations in Bay State Fertilizer. It is significant to note that some of these regulated metals are essential plant nutrients necessary for normal, healthy growth.

PLANT NUTRIENTS	AVERAGE BAY STATE ANALYSIS* (ppm)	EPA LIMITS (ppm)	MA DEP LIMITS (ppm)
Boron	ND	NR	300
Copper	612	1500	1000
Molybdenum	18	75	25
Nickel	25	420	200
Zinc	1130	2800	2500
OTHER METALS	AVERAGE BAY STATE ANALYSIS* (ppm)	EPA LIMITS (ppm)	MA DEP LIMITS (ppm)
Arsenic	ND	41	NR
Chromium	49	NR	1000
Cadium	2	39	14
Lead	171	300	300
Mercury	2	17	10
Selenium	4	100	NR

ND-Not Detected NR-Not Regulated June 2008  
ppm- parts per million

MA Type 1 Limits-The product meets EPA's standards for Exceptional Quality and MassDEP's Type 1 standards which means it can be used without restrictions on lawns and gardens.

# 4-3-0 SLOW-RELEASE FORMULA

### FOR USE ON:

- lawns
- shrubs
- annuals
- vegetable gardens



# Bay State fertilizer

The natural choice for seasons to come



## The Bay State Advantage

Enhances the beauty of your lawn, season after season.

Breaks down slowly to last longer.

Won't burn your lawn or plants.

Reduces the need for frequent watering.

Supplies iron and other micronutrients.



## Bay State fertilizer

The natural choice for seasons to come



Massachusetts Water Resources Authority  
551 South Street, Quincy, MA 02169

Visit our website at

[www.mwra.com/sewer/htm/baystate.htm](http://www.mwra.com/sewer/htm/baystate.htm)  
to find out more about Bay State Fertilizer  
617-773-4293

100%  
RECYCLED  
WASTEWATER  
SOLIDS - RICH  
IN ORGANIC  
MATTER



## What is Bay State Fertilizer

Bay State Fertilizer is a 100% recycled product made from solids

recovered from the wastewater of 43 Massachusetts communities served by the Massachusetts Water Resources Authority. These solids are rich in organic matter and nutrients. MWRA first treats the solids biologically, using beneficial microorganisms, then dries them at high temperatures to destroy harmful bacteria. The resulting biosolids fertilizer meets the highest EPA quality standards. These safe, easy-to-use granules now bring new life to lawns and gardens.



## Nutrient Content

Fueled by sun and water, plants grow by using carbon and other nutrients such as nitrogen, potassium, phosphorous, zinc, iron and magnesium they extract from the soil. Bay State Fertilizer is rich in iron, which is essential for chlorophyll formation, making your plants lush and green.

Although organic biosolids fertilizers have lower nutrients concentrations than most synthetic fertilizers, they provide a more uniform supply of nutrients.

	GUARANTEED	AVERAGE
Total Nitrogen	4.0%	5.2%
Water Insoluble Nitrogen	3.7%	4.5%
Water Soluble Nitrogen	0.3%	0.7%
Available Phosphorus (as P2O5)	3.0%	4.9%
Potassium (as K2O)	0.0%	0.1%
Iron	2.0%	3.8%

ADDITIONAL MACRO- AND MICRO-NUTRIENTS	
Calcium	1.9%
Sulfur	2.6%
Copper	0.06%
Zinc	0.1%
Magnesium	0.6%



## The Natural Choice for Seasons to Come

Bay State Fertilizer is similar in some ways to compost. Like

compost, Bay State Fertilizer adds organic matter to the soil, helping to improve the soil's structure and texture, and increasing the soil's moisture holding capacity. Unlike compost, however, Bay State Fertilizer is a significant source of nitrogen and other plant nutrients, and can be easily applied using conventional spreaders.

The nitrogen in Bay State Fertilizer is in a natural organic form, which means that it is initially unavailable for plant use and will not dissolve in water. Microorganisms in the soil gradually mineralize this organic nitrogen, transforming it to water-soluble inorganic nitrogen which can be taken up by plants. Instead, Bay State Fertilizer gradually nurtures your lawn and garden from one season to the next, promoting stronger roots and deeper green color.

The slow release of nutrients benefits not only your plants, but the environment too. With the use of some fertilizers, the leaching of excess water-soluble nitrogen to groundwater is an environmental concern. With Bay State Fertilizer, however, plants have a greater opportunity to take up the nitrogen, so less is lost through leaching. Results of research conducted at the University of Massachusetts Amherst indicate that even when Bay State Fertilizer is applied at a rate six times higher than that recommended, it poses no threat to groundwater quality.

AS WITH MOST ORGANIC FERTILIZERS, THIS PRODUCT MAY PRODUCE A SLIGHT ODOR WHEN IT FIRST BECOMES WET. THE ODOR USUALLY DISSIPATES IN A FEW DAYS.

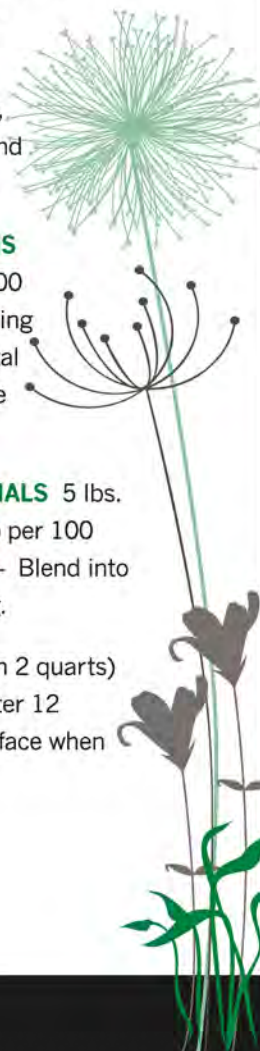


## how to apply

**LAWNS** One 40 lb. bag per 2000 or one 50 lb. bag per 2500 square feet – For established lawns, apply evenly 2 times during the growing season: late April- mid-November. Watering-in is not necessary.

**SHRUBS** 1 pint for transplanting – At transplanting, mix with the soil used to fill the space between the root ball and the side of the excavation.

1.5 pints for spring fertilization – In spring, work into the soil around the base of the shrub.



### VEGETABLE GARDENS

4 lbs. (3 quarts) per 100 square feet when planting – Use as a supplemental fertilizer to improve the condition of the soil.

### ANNUALS & PERENNIALS

5 lbs. (just under 4 quarts) per 100 square when planting – Blend into soil at time of planting.

3 lbs (a little more than 2 quarts) per 100 square feet after 12 weeks – Spread on surface when reapplying.