



# Long Beach Regional Biosolids Facility Product Information Sheet

## **Produced by:**

Long Beach Regional Biosolids Facility (LBRBF)

313 N. 6<sup>th</sup> Street, Long Beach, WA 98631

For questions, contact Don Zuern, Water & Sewer Supervisor at 360.642.2203

## ***What are Biosolids and how are they produced?***

Biosolids are the natural by-product of the wastewater treatment process and contain nutrients essential to healthy plant growth. LBRBF produces biosolids by an Aerobic Composting Process with biosolids that are partially thickened at the Wastewater Treatment Plant before being composted. The process produces Class A, Exceptional Quality (EQ) Biosolids. The composted biosolids meet all applicable federal and state regulated requirements for 'Exceptional Quality' Class A biosolids. LBRBF's Biosolids are tested by an accredited commercial laboratory to ensure that it is continually meeting standards for quality and safety to meet the following standards:

- The pollutant concentration standards in Table 3 of WAC 173-308-160;
- Class A pathogen reduction standards in WAC 173-308-170;
- Vector attraction reduction standards in WAC 173-308-180.

## ***How do I handle Biosolids?***

Biosolids, as with any type of soil amendment, are intended to be used in a safe responsible manner. LBRBF encourages proper use of the product for protection of public health and the environment (see next page). Store and apply responsibly. Do not let Biosolids enter waterways either through run-off or during application. Use good hygiene by washing with soap and water after handling. Store biosolids in a cool, dry place.

## ***How Much Do I apply?***

Biosolids are applied based at an agronomic rate that provides the amount of nitrogen necessary for the optimum growth of targeted vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water. Nitrogen is a vital component of plant nutrition. In many gardens, increased nitrogen leads to healthier, greener foliage, but more isn't always better. If your soil is already nitrogen-rich, excessive nitrogen fertilizing delays flowering and increases the likelihood of insect infestation. Before you use Biosolids, fertilizers or other products to adjust nitrogen levels, you need to get a baseline reading of your garden soil. Measuring nitrogen in soil requires special nitrogen test kits, sold at many garden supply stores. Please note, this product is not a commercial fertilizer. All nutrient claims are estimates or averages and are not guaranteed.

## **When to Use Compost?**

- Any time you're preparing soil for planting
- Mulching beds and gardens in spring, summer, or fall
- Top-dressing lawns in spring or fall.

## **Planting New Garden Beds or Lawns**

Spread a 2-4 inch layer of compost and mix into the upper 6-12 inches of existing soil: use more in sandy soils, and less in heavy clay. Reapply ½-1 inch annually on garden beds.

## **Mulch (surface applications on landscape beds)**

Spread a 1-2 inch layer of coarse, woody compost. To allow proper airflow, it is best not to pile mulch around the stems of trees and shrubs. Pull mulch 1-2 inches away from stems.

## **Top Dressing for Lawns**

Spread a ¼ to ½ inch layer of fine screened compost, and rake it into the lawn. For best results, plug-aerate the lawn before top-dressing. Overseeding at the same time will thicken thin patches in lawns.

## **How much do I apply? (Suggestions From A user's Guide to Compost)**

- Estimate the planting area (Math Hint: Square feet = length x width)
- Decide upon the appropriate application depth of the compost (see above)
- Use the charts below to estimate your compost needs. (Abbreviations: ft = foot; yd = yard; sq = square; cu = cubic.)

- Conversions: 9 square feet = 1 square yard; 27 cubic feet = 1 cubic yard.

**Question: I have a plot about this big, how much compost do I need?**

(Note as noted above, it is best to get a baseline reading of your garden soil. Measuring nitrogen in soil requires special nitrogen test kits, sold at many garden supply stores.)

Plot Size	# of Sq Feet	1/2" Deep – Mulching Or Top-Dressing	2" Deep – Amending new lawns or gardens
5' x 10' plot	50 sq ft	2.08 cu ft of compost	8.33 cu ft of compost (0.31 cu yd)
10' x 10' plot	100 sq ft	4.17 cu ft of compost	16.66 cu ft of compost (0.62 cu yd)
20' x 50' plot	1,000 sq ft	41.7 cu ft of compost	166.7 cu ft of compost (6.2 cu yd)
1 acre	43,600 sq ft	1,815 cu ft of compost (67 cu yd)	7,257 cu ft of compost (268 cu yd)

This data based on “A User’s Guide to Compost” <https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Organic-materials/Managing-organics-compost>

**What if I have a large site for application?**

Please contact us and we will assist in determination of agronomic rates based on intended use.

**What about...?**

If you have questions, please contact us. Complete nutrient and metals analytical data is included below.

**Class A, Exceptional Quality Biosolids 3<sup>rd</sup> Party Testing Results**

Pollutant	WAC 173-308-160 Table 3 Limits (ppm)	Composite Sample (ppm) DATE OF SAMPLING
Arsenic	41	
Cadmium	39	
Copper	1500	
Lead	300	
Mercury	17	
Molybdenum	*	
Nickel	420	
Selenium	100	
Zinc	2800	

All limits and results in mg/kg (ppm) dry weight basis.

\*Molybdenum level is under reconsideration by the EPA. Table 1 limit is 75 ppm.

Pathogen Reduction	WAC 173-308-170(3)(a)(b)(ii)(A) Limit (MPN/g)	*Seven Sample Avg. (MPN/g) 2/21/21
Fecal Coliform	<1,000	

All Fecal Coliform limits and results in MPN/g of total solids (dry weight basis).

\*Each sample was less than the limit.

Moisture Content	Daily Sample Avg. 7/15/20
Total Solids	49%

Nutrients	Composite Sample
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	<b>DATE OF SAMPLING</b>
Total Nitrogen	%