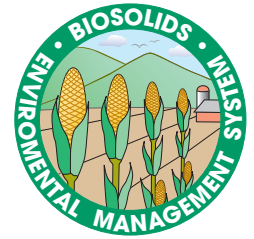


City of Los Angeles

Biosolids Fact Sheet: Monitoring



What are biosolids?

Biosolids are the nutrient rich organic byproducts resulting from wastewater treatment. Biosolids are not raw human waste and do not include ash from incinerators, grit and screenings collected during preliminary treatment of wastewater, or hazardous waste. Biosolids can be in several forms including a liquid, a rich moist soil, a dried pellet, or compost.

Are biosolids safe to use?

Yes! The City of Los Angeles beneficially uses biosolids by applying them to farmland as a soil amendment and by producing compost. As required by the 1987 Amendment to the Clean Water Act, the U.S. Environmental Protection Agency (EPA) developed a regulation to protect public health and the environment from any reasonably anticipated adverse effects of certain pollutants that might be present in biosolids. This published regulation, known as “the Part 503 rule” or “Part 503” for short, establishes pollutant limits, pathogen reduction, and vector attraction reduction requirements for the beneficial reuse of biosolids when they are applied to land for conditioning soil or fertilizing crops or other vegetation. Most of the requirements of the Part 503 rule are based on 25 years of research results and operating experience gained by EPA and its understanding of the risks and benefits of using or disposing of biosolids.

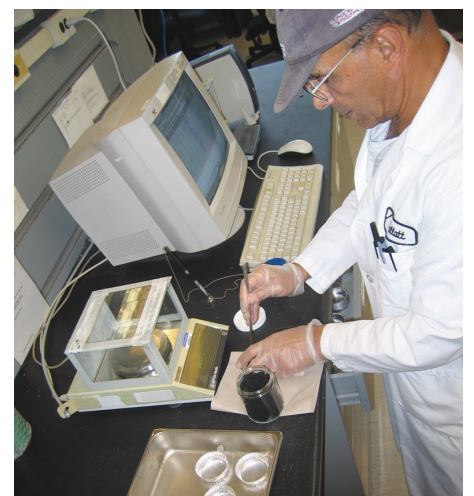


There are two pathogen reduction classifications, Class A and Class B biosolids, under this regulation. Class A biosolids are the result of a higher level of treatment and consequent pathogen reduction than Class B biosolids, and Class A biosolids are safe for direct human contact. The City produces Class A biosolids, which contain little or no pathogens

and meet the requirements of federal, state, and local ordinances. Because the City's biosolids exceed the most stringent Part 503 standards for pollutant concentrations (metal limits), pathogen reduction, and vector attraction reduction, they meet the Part 503 definition of Exceptional Quality (EQ) biosolids. EQ biosolids meet the Class A pathogen reduction requirements, the most stringent pollutant concentrations (metal limits), and the vector attraction reduction standards. Therefore, the City's EQ Class A biosolids are safe for land application. To date, there have been no documented cases of negative impacts to human health or the environment when a biosolids program has met these strict regulatory requirements and follows best management practices.

Who performs testing of biosolids?

Biosolids tests are performed by the City of Los Angeles Bureau of Sanitation Environmental Monitoring Division (EMD) using EPA-approved methods. All EMD laboratories are certified by the Environmental Laboratory Accreditation Program (ELAP) of the California Department of Health Services. As an ELAP-accredited laboratory, EMD is periodically audited by ELAP staff, routinely conducts internal audits, and adheres to an ELAP-approved, annually updated Quality Assurance (QA) plan that conforms to EPA QA requirements. Specifically, every batch of samples analyzed by EMD contains various Quality Control (QC) samples that are used to assess the precision and accuracy of the data produced. Data that meet EMD's in-house QC standards, which in most cases are stricter than EPA QC standards, are approved for use in biosolids certification reports. EMD's data is tracked and maintained in a computerized Laboratory Information Management System (LIMS).



Why are the biosolids tested?

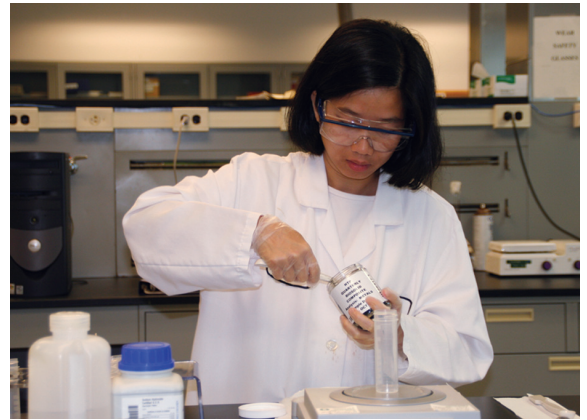
The City performs laboratory tests on biosolids to ensure that we are meeting regulatory compliance and following best management practices when using biosolids. The City complies with:

- U.S. EPA 40 CFR Part 503 requirements (Part 503 rule)
- NPDES (National Pollutant Discharge Elimination System) permit requirements.
- County Ordinance requirements (Kern County)
- California Manual of Good Practice for the Agricultural Land Application of Biosolids
- Compost Facility requirements.

Are the biosolids tested to ensure the production of Class A biosolids?

All city biosolids are tested using EPA-approved methods.

- Under Part 503 requirements, biosolids collected from the City's Hyperion Treatment Plant (HTP) and Terminal Island Water Reclamation Plant (TIWRP) are tested for fecal coliform bacteria, helminth ova, enteric virus, total solids, volatile total solids, and metals (arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc).
 - Under Kern County requirements, biosolids collected from the City owned farm are tested following the Part 503 requirements. In addition, biosolids are also tested for Salmonella (bacteria), dioxin, and PCBs.
 - Under NPDES permit requirements, biosolids collected from HTP and TIWRP are tested for priority pollutants (cyanide, metals, pesticides & PCBs, BNA, and Volatile Organic Compounds (VOC), total organic halides, and herbicides. The monitoring frequency of the biosolids testing is based on the amount of biosolids produced per year. For the Hyperion Treatment Plant, which produces more than 15,000 metric tons per year, the monitoring frequency is once per month. For TIWRP, which produces more than 1,500, but less than 15,000 metric tons per year, the monitoring frequency is once per 60 days.
- In addition, the City voluntarily provides nutrient analysis data to the land applier to help them assess the value of the biosolids as a soil amendment.



What we have found: Exceptional Quality (EQ) Class A biosolids.

The City's biosolids meet the EPA Part 503 EQ criteria: Class A pathogen reduction requirements, the most stringent metal limits (pollutant concentrations), and the vector attraction reduction standards. The City produces high quality biosolids that are safe for land application and protective of public health and the environment.

Where can I obtain information about the City's biosolids program?

Information about the biosolids program can be obtained by contacting us at 310-648-5877 or visiting our website at: www.lacity.org/SAN/biosolidsems. Also, if you would like a tour of the laboratory facility please contact us at 310-648-5363.

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