



What are Biosolids?

Biosolids are the nutrient-rich organic material resulting from the treatment of domestic wastewater.

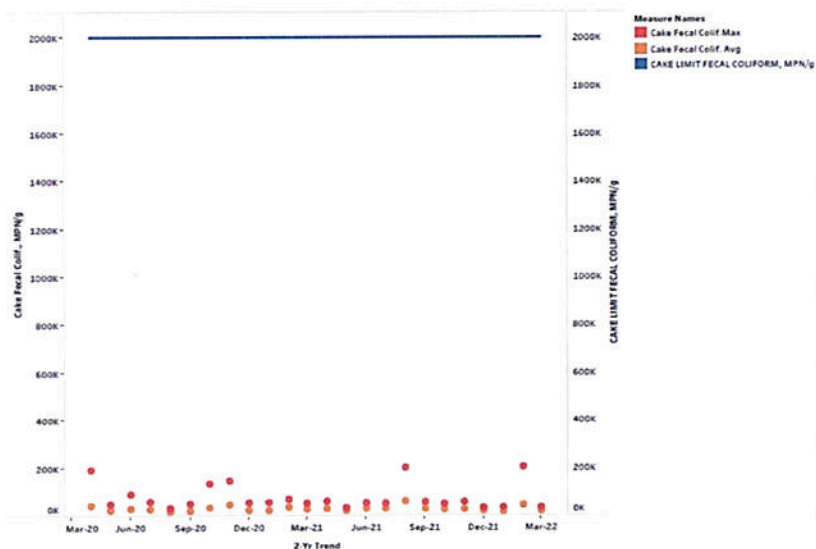
Biosolids differ from "raw sludge" in that they are treated to standards required for recycling.

The solids in sludge (fecal material, toilet paper, food, etc.) is liquified and broken down by anaerobic bacteria to form gases (methane and CO₂), water, and more bacteria. The water is then pressed and filtered out. Biosolids are the residual solids remaining after this process.



CVWRF's Land Application Site in Weber County

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Class B Biosolids (EPA 503 Regulations)

- Digested at greater than 95 deg. F for greater than 15 days (actual time 40 days)
- Fecal Coliforms – less than 2,000,000 CFU per gram solids
- Greater than 38% volatile solids destruction (actual 65% destruction)
- Metals limits for As, Cd, Cu, Pb, Hg, Mo, Ni, Se, Zn
- Sample bi-monthly (actual weekly)

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Class B Land Application

Utah Division of Water Quality Permit

Water Protection:

- Applied in manner that will not contaminate groundwater
- Applied at least 30 ft from any water body and in a manner that will not cause violation of water quality standards from discharge of surface runoff.
- Restrictions on application to frozen ground

Access Restrictions:

- 30 days for grazing
- 30 days for harvesting feed crops, fiber crops and food crops not in contact with soil
- Between 14 and 38 months for food crops in contact or under soil depending on specific conditions
- 30 days for low public exposure areas
- 1 year for high public exposure areas

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Class B Land Application

Utah Division of Water Quality Permit

Agronomic rates based upon EPA region VIII guidance

Deep soil testing:

- Annually if reapplied every 5 years or less
 - ✓ Nitrate Nitrogen ($\text{NO}_3\text{-N}$) down to five feet
 - ✓ Soil Phosphorus (top foot)

Field Storage:

- 30 days (November to April)
- 90 days (May to October)
- Constructed berms and replanting of storage areas
- Same storage area used only once every five years

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CVWRF Haul Trucks

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Dewatered product application

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Central Valley WRF
Biosolids Land Application Program
West Weber County (looking southwest)

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Biosolids Compost Test Plots (Feb 2022)



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Biosolids Compost Test Plots (April 4, 2022)