



**Los Alamos County**

**Compost Certification Letter**

**What is compost?** A Biological way to speed up the decay process of organic material under the right conditions of oxygen, water, carbon and nitrogen.

**How is compost made?** A mixture of materials (feedstock) is piled up into 7 feet tall windrows and turned every other day to aerate and mix. Microorganisms consume digestible carbon and generate heat, carbon is converted to long-chain carbohydrates (sugars & Starches) to stabilized humic acid.

**Why use compost?** Provides N (nitrogen) and other micro nutrients plus copper, iron, manganese, zinc and other nutrients for healthy plants. Slows down the release of nutrients when used with fertilizers. Soil benefits of compost; holds water lowers water bills, holds micronutrients, and improves soil aggregation (erosion).

Rate to Purchase

Free to anyone (does not have to be a Los Alamos County resident) with a \$3.00 per cubic yard loading fee

Compost Material

Biosolids – Waste Sludge from the LAC Wastewater Treatment Plant	25%
Stable Waste – Horse Manure from the LAC stables	25%
Green waste – Tree trimmings, leaves, grass clippings	50%

Regulations

CFR 40 Part 503 – Subpart B (Land Application of Biosolids)

Pollutant Limits and Monitoring Frequencies

Toxicity Characteristic Leaching Procedure (TCLP)	once/5 years
PCB's	once/year
Mercury	once/year
Heavy Metals	once/year
Fecal Coliforms	each windrow

Pathogen and Vector Attraction Reduction

Biosolids treated in an aerobic process for 14 days or longer at a temperature higher than 40° C with an average of 45°C.

Pollutant	503.13 Table 2 Cumulative Pollutant Loading Rate (kg/hectare)	503.13 Table 4 Annual Pollutant Loading Rate (kg/hectare/year)
Arsenic	41	2.0
Cadmium	39	1.9
Copper	1,500	75
Lead	300	15
Mercury	17	0.85
Nickel	420	21
Selenium	100	5.0
Zinc	2,800	140

Annual Whole Sludge (Biosolids) Application Rate				
for Biosolids Sold or Given Away in a Bag or Other Container				
01/14/2015				
Metal	Biosolids Concentrations (milligrams/Kilogram)	APLR (kilograms/hectare/year)	AWSAR =	
			APLR	= metric tons/hectare
			Con. In Biosolids (0.001)	
<i>example</i>	<i>6</i>	<i>5</i>	<i>5/(6 X 0.001)</i>	<i>= 833</i>
Arsenic	ND	2.0		=
Cadmium	1.0	1.9		= 1900
Chromium	30			
Copper	240	75		= 313
Lead	11	15		= 1364
Molybdenum	5.6			
Mercury	0.54	0.85		= 1574
Nickel	10	21		= 2100
Selenium	ND	5.0		=
Zinc	520	140		= 269

APLR = Annual Pollutant Loading Rate AWSAR = Annual Whole Sludge (biosolids) application rate (dry metric tons of biosolids/hectare/year) C = Pollutant Concentration 0.001 = Conversion Factor

Fecal Coliform Limits – Class A < 1,000 cfu/gram Class B < 2,000,000 cfu/gram

Los Alamos Compost

Fecal Coliform Results - Windrow results so far have been < 230 cfu/gram

Would not recommend using compost with biosolids on vegetable gardens

“I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in 503.14 (e), the Class A pathogen requirements in 503.32 (a) and vector attraction reduction requirements have been met. This determination has been made under my direction and supervision. Operation, sampling and testing are performed by qualified personnel. I am aware that there are significant penalties for false certification including the possibilities of fine and imprisonment.”

X Jeff Ayers  
 Jeff Ayers  
 Los Alamos County  
 WWTP Superintendent

Date: 5/17/16

**If you have any questions regarding the Compost, Federal Regulation, and or testing requirements, please contact:**

**Jeffery Ayers, WWTP Superintendent or  
 Jennifer Baca, WWTP Supervisor at 662-8269  
 Angelica V. Gurule, Environmental Services Manager at 662-8163**