

Pilot Compost Program for Agricultural and Community Use in El Dorado County

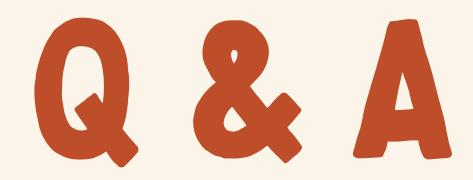
El Dorado Disposal (Waste Connections) is looking to partner with the County of El Dorado to create a Compost Procurement Program that benefits farmers, ranchers, green spaces, gardeners, and the public. The procurement of recycled organic material is mandated by CA SB-1383 and extends to compost. If the County chooses to use compost to meet the mandates requirements, it will need to deliver over 7,000 tons, annually, to the County's residents. It is for this purpose, we ask our community farms and ranches to investigate the beneficial uses of compost. We would appreciate any feedback, recommendations, or potential problems with the program. Large demand and interest in a compost program will help the County of El Dorado make an informed decision.



20 tons of compost ready for use

Program Details

- This program would bring trucks of compost, fully loaded with ~20 tons, directly to farms and other AG lands. Cost limitations require full loads of compost to be delivered to farms and sites with trucking accessibility.
- Compost and hauling would be paid for by El Dorado County. Additional hauling fees may cover the cost of transport to more rural areas of the county (~\$50-200 additional based on trip times).
- Delivery dates would be managed by El Dorado Disposal. Once a property is site-checked for delivery and accessibility, a farm will be able to request a delivery date(s).
- The receiving farm or ranch will be responsible for application, spreading or tilling once the compost is delivered. Nitrogen is reported to the AG department like any other fertilizer addition.
- If your property needs compost but accessibility is a problem, partnerships with multiple farms might be a solution. El Dorado Disposal is also looking into Community Collection Sites, where smaller volumes of compost may be collected for free.
- Future agricultural & environmental grants to farms or the County may help with equipment or costs associated with application. Shared resources will need to be developed with the AG community to help all sizes of farms. These resources will be crucial in developing Best Management Practices for compost use.



For questions about this program please email El Dorado Disposal

SUSTAINABILITY4030@WCNX.ORG



BENIFITS OF COMPOST IN SOILS



Find more info regarding compost and its uses

CALRECYCLE.CA.GOV/ORGANICS/FARMING

• What If I can't take a truck up to my property?

In the short term, we don't have a better option than full size trucks. You will likely want to partner with a farm or friend that can help load and haul smaller amounts by pickup or trailer to your property.

How will this be paid for?

This program would be paid for by the county of El Dorado and will likely come from hauling fees associated with trash service (El Dorado Disposal). SB-1383 mandates a program that procures organic material, and compost is the most economical way to fulfill this state requirement. Large volumes of compost, directly to the AG community is the most efficient, logistical, and cost effective way to meet the County's tonnage goals.

• Can I see the compost before I accept it on my farm?

You will likely need to visit a farm that has already received compost, contact the sustainability department of El Dorado Disposal to make arrangements.

• How is this compost made?

The compost that will be provided is made from municipal sources. A feedstock of a variety of plants, grass and food products are composted on an industrial scale. This process helps assure a uniform product that has reached the correct temperatures needed to kill biologicals as well as unwanted seeds. The finished product is sifted for uniform size and impurities. Like nearly all industrial composts, there is the possibility of small contaminants, but this is nominal.

• What is the application rate for compost on a vineyard, orchard or farm?

Crops of all types have different needs and therefore soils should be amended appropriately. Light surface applications of 1-2 tons/acre are recommended in the rainy seasons to keep the compost wet and in place. Much heavier application rates can be used to amend poor quality or low drainage soils, or for preparation of soils for new plantings. The USDA recommends compost in vineyards to be spread at 2-6 tons/acre with disking or other tillage recommended for heavier applications. Planting a native or cover crop with compost is recommended to help fix nitrogen on the long term.

COMPOST QUALITY & TESTING

Compost at Waste Connections and partnered facilities is monitored often for quality, health, and composition of beneficial nutrients. Compost returning from these facilities is screened for impurities, leaving behind a beneficial product to the environment. Optimal soil qualities lead to healthier land and fauna as well as improved soil retention, clearer rivers, and lakes, and reduces erosion.

(Sample from Waste Connections facility below)

Nutrients	Dry wt.	As Rcvd.	units	Stability Indica			
Total Nitrogen:	1.5	0.97	%	CO2 Evolution		Respirometery	
Ammonia (NH ₄ -N):	14	8.8	mg/kg	mg CO₂-C/g OM/day		2.6	
Nitrate (NO ₃ -N):	1.9	1.2	mg/kg	mg CO ₂ -C/g TS/day		1.4	
Org. Nitrogen (OrgN):	1.5	0.97	%	Stability Rating		stable	
Phosphorus (as P ₂ O ₅):	0.59	0.38	%				
Phosphorus (P):	2600	1600	mg/kg	Maturity Indicator: Cucum		ber Bioassay	
Potassium (as K ₂ O):	0.85	0.55	%	Compost:Vermiculite (v:v)		1:2	
Potassium (K):	7100	4500	mg/kg	Emergence (%)		100	
Calcium (Ca):	2.1	1.4	%	Seedling Vigor (%)		100	
Magnesium (Mg):	0.54	0.35	%	Description of Plants		one weed	
Sulfate (SO ₄ -S):	110	72	mg/kg				
Boron (Total B):	42	27	mg/kg	Pathogens	Results	Units	Rating
Moisture:	0	36.0	%	Fecal Coliform	410	MPN/g	pass
Sodium (Na):	0.077	0.049	%	Salmonella	< 3	MPN/4g	pass
Chloride (CI):	0.13	0.085	%	Date Tested: 09 N	Mar. 23	_	
pH Value:	NA	8.08	unit				
Bulk Density:	22	34	lb/cu ft	Physical Cont	aminants**	% by dry wt	
Carbonates (CaCO ₃):	< 0.1	< 0.1	lb/ton	Total Plastic		< 0.1	
Conductivity (EC5):	1.8	NA	mmhos/cm	Film Plastic		< 0.1	
Organic Matter:	56.2	35.9	%	Glass		< 0.1	
Organic Carbon:	27.0	17.0	%	Metal		< 0.1	
Ash:	43.8	28.0	%	Sharps		ND	
C/N Ratio	18	18	ratio	Total		< 0.5	
AgIndex	> 10	> 10	ratio	Total		< 0.5	
Metals	Dry wt.	EPA Limit	units	Size Distributi	on		
Aluminum (AI):	6400	-	mg/kg	MM	% by weight		
Arsenic (As):	2.6	41	mg/kg	> 50	0.0		
Cadmium (Cd):	< 1.0	39	mg/kg	25 to 50	0.0		
Chromium (Cr):	26	-	mg/kg	16 to 25	0.0		
Cobalt (Co)	5.9	-	mg/kg	9.5 to 16	2.6		
Copper (Cu):	40	1500	mg/kg	6.3 to 9.5	7.6		