



Finished Coeur d'Green Compost

Recommended Uses

Coeur d'Green™ is recommended for use as an amendment for top soil, potting soil, nurseries, golf courses, humus for sandy soils, land reclamation projects, and vegetable gardens. It meets all U.S. Environmental Protection Agency regulations for unrestricted use in the areas of agriculture, agronomy, and horticulture. The product is regulated under the city's wastewater discharge permit and is regularly tested for toxicants and for pathogenicity. The low levels of toxicants and pathogens qualify our product as Class "A" by the E.P.A.

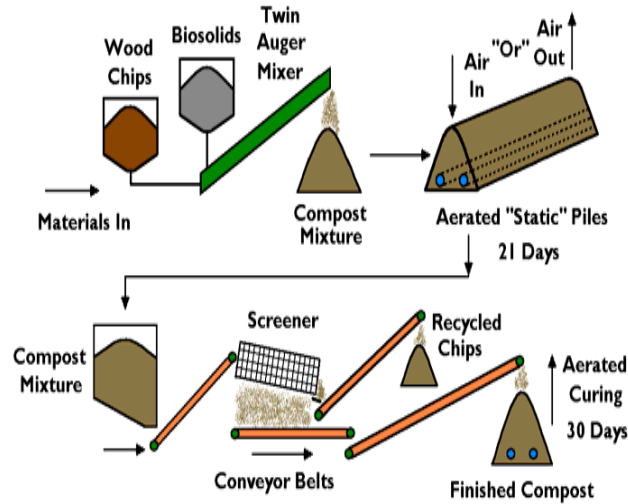
Compost contains essential micro-nutrients and looks, smells and has a texture similar to commercial soil conditioners. It is about 60% biosolids and 40% wood product. Although compost fertilizer values (N, P & K) may be less than chemical fertilizers, their release is slower and may be more beneficial. The organics in compost provide valuable water retaining capabilities in soil. Representative properties of compost are:

pH	Slightly Acidic @ 6.1
Nitrogen, % (as N)	3.1
Phosphorus, % (as P ₂ O ₅)	3.8
Potassium, % (as K ₂ O)	0.21
C.E.C., meq/100 grams	69
Organic Matter, %	48
Bulk Density, lb/ft ³	35-40

Coeur d'Green™ is a registered trademark to the City of Coeur d'Alene, Idaho. TM# 13504

Coeur d'Green is also licensed with the State of Idaho as a soil amendment product. Certificate # 2640

Plant Profile:



For guided group tours of the compost facility, contact the Office of the Superintendent at the address below.

**City of Coeur d'Alene
Wastewater Utility Department
710 E. Mullan Ave.
Coeur d'Alene, ID 83814
Phone: 208-769-2281
Fax: 208-769-2338**

**Text: H. Sid Fredrickson, Supt.
Photos: H. Sid Fredrickson &
Clark Thomas, Compost Operator
August 2010**

Idaho Dept. of Agriculture Soil Amendment # 2640

**We do not sell direct to the public however,
Coeur d'Green Compost can be purchased at:**
Northland Nursery 8093 W. Prairie Ave., Post Falls, ID
Tumble Stone 13131 N. Govt. Way, Hayden, ID
Rockhound Landscape Supply 2591 N. Hwy 41, Post Falls, ID



**Municipal
Biosolids
Composting**

Coeur d'Green™



Produced by

City of Coeur d'Alene

Coeur d'Green™ Compost

In 1990 the city constructed the region's first composting facility for municipal biosolids. These are byproducts of municipal wastewater treatment. Prior to this process, treated and de-watered biosolids (sludge) were made available to the general public. New concerns and regulations led the city to try this innovative form of biosolids management. Today the facility produces about 4800 cubic yards of compost annually. It is a "Class A" product that is unrestricted in its horticultural use and can be obtained from area landscapers.

Located at 3500 Julia Street, the 18-acre facility is staffed by two compost operators. It is here that the annual average of 18,000 wet-pounds **per day**, 365 days per year, of biosolids are processed during the 51-day journey through the plant. The compost is then ready for wholesale purchase by our vendor(s).

The process used is called **Aerated Static Pile Composting** because non-moving, "static", piles are built and aerated for the composting to occur. While the facility has been on line since 1990, several major additions and modifications have been made. They include covered chip storage, and aerated curing additional outside bays, conveying, mixing and screening equipment. Other essential equipment includes 2 front-end loaders of 3 cubic yard capacity—used for building and tearing down the piles.

Main Composting Building



How Composting Works

De-watered biosolids from the city's wastewater treatment plant are brought to the compost facility. Here it is mixed with a bulking agent—wood chips.

The wood chips provide three functions:

- They promote a loose mix with many spaces between the chips to allow air to circulate. This provides the needed oxygen to support the compost process and the high temperatures needed for EPA requirements.
- They are used to adjust the mixed pile moisture content to an optimum ratio.
- They are used to adjust the nutrient balance of the mix to promote ideal compost operation.



Chip Hopper & Twin Auger Mixer

The compost mix is then formed into piles—10 piles inside and up to 6 on the outside. Perforated air pipes are located at the bottoms of the piles. Air is either forced into, or sucked from the piles. Drawing air through the piles is done as both a temperature and odor control measure. As the biological activity takes place, the organic material in the biosolids is decomposed, giving off heat. The temperature must rise to at least 131° F for 3 consecutive days and average 113° F for 14 days. The mix remains in the piles for a total of 21 days. Prior to screening, they are slowly allowed to cool to ambient temperature.

A front-end loader then loads the pile contents into a screening unit to separate the wood chips from the compost. The wood chips are recycled for reuse with the next batch of incoming biosolids.



Aerated "Static" Composting Piles

The screened compost is a fine-grained humus-like material which is placed in aerated curing piles for 30 days prior to sale. Curing occurs under covered storage.

During heavy biosolids production in the summer months when phosphorus removal at the advanced wastewater treatment plant takes place, composting is done on the exterior as well as inside the main building.

Odor control is accomplished using compost-bed biofilters that act as biological odor scrubbers. These have their greatest value when drawing air through the piles—rather than blowing air into them—when ammonia is present.

The final product is sold wholesale to landscaping contractors who sell retail to the public. **The City does not sell compost directly to the public.** Please contact our office for information on current vendors.

Screening Unit

