

City of Waco sells Dairy Manure Compost to Citizens

The City of Waco initiated a project in spring 2002 to provide dairy manure compost to local homeowners for use on their lawns, landscapes and gardens. The material was purchased from commercial compost facilities located in the North Bosque and Leon River watersheds. The City's cost of the material was reduced by \$5 per cubic yard, thanks to the Texas Commission on Environmental Quality (TCEQ) Dairy Compost Rebate Program funded through an EPA grant.

Dairy manure compost contains many of the essential nutrients needed by "yard" plants, including lawn grasses, ornamentals, trees, shrubs and garden crops, and organic matter that improves soil tilth and water holding capacity. Additionally, because most of the nutrients contained in the compost are gradually released over time, need for re-treatment is minimized as well as potential for off-site movement of the more mobile nutrients (such as nitrate nitrogen).

Research and demonstration trials conducted by the Texas Agricultural Experiment Station and Texas Cooperative Extension have shown that dairy manure compost is a good substitute for inorganic fertilizers. It can be used by homeowners in combination with inorganic fertilizers to balance nutrients, optimize plant growth, prepare areas for new plants or renovate problem areas in lawns, flower beds and gardens.

This city project is now in its fourth year. Christian Heger, Solid Waste Services, City of Waco, said that with the aid of the TCEQ Compost Rebate Program, the city purchased dairy manure compost for resale to its citizens during two weekends in February 2005. Its citizens bought about

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1,200 cubic yards of dairy manure compost in bags and truckload lots ranging from 1-cubic foot to about 9-cubic yards.

Heger said a city that has interest in initiating a similar project with dairy manure compost should consider several factors. First, take advantage of the TCEQ Dairy Compost Rebate Program as long as it's available. Next, buy the dairy compost from a reliable and reputable composter that is recommended by TCEQ and which meets homeowners' quality needs. Heger's city bought dairy manure compost that contained small "rocks" in 2002. That material might have been suitable for constructing a new flower bed where it would be incorporated into the soil but it was not acceptable for use in top dressing lawns.

Heger also noted that the distribution site needs to be located in an area that is well suited for storing and dispensing the compost. The site needs to be somewhat isolated from city activities but readily and easily accessible to the citizens who will purchase dairy manure compost.

When possible, involve volunteers in the project. They can help with numerous activities including collecting money from citizens who purchase the material, directing traffic, and helping load the material. Heger said his city had volunteers who were college students, Master Composters and others.

Timing of the sale is also important. In 2005, the city of Waco scheduled the dairy compost sale for two weekends in February. Due to the cool, wet conditions, Heger said the sale would have been even more successful had it been scheduled for two weekends in March when citizens were more likely to start working on their lawns and gardens.

Heger said his city neither gained nor lost money when it sold dairy manure compost bought through the TCEQ Compost Rebate Program. The city made the dairy manure compost available to its citizens at cost so they might have greater access to a valuable local resource that provides an alternative to inorganic fertilizers. In addition, by utilizing this local resource, the

city and its citizens are helping protect local water quality and maintain the viability of a vital part of the economy.

The dairy compost not purchased by citizens was donated to public works such as landfills and parks. However, the 2005 sale was the only sale where leftover dairy compost existed and had to be donated to the public works. In previous sales, Heger said no compost was available to be donated as all of the material was bought by the citizens.

In a small but important way, this project provided an avenue for removing composted dairy manure from the impaired regions of the North Bosque and Leon River watersheds while providing citizens of Waco, who depend on water from these watersheds, with quality organic fertilizer and soil amendments. Additionally, it demonstrates to other local communities how to actively involve its citizens in using a natural resource on their own land while simultaneously supporting the Central Texas dairy industry.