



Legislation Text

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AGENDA INFORMATION SHEET

DEPARTMENT: Utility Administration

ACM: Howard Martin, 349-8232

Date: February 27, 2017

SUBJECT

Receive a report on the 2017 Water Environment Association of Texas Ronald B. Sieger Biosolids Management Award to the City of Denton Beneficial Reuse department.

BACKGROUND

The Water Environment Association of Texas Ronald B. Sieger Biosolids Management Award is presented to a WEAT member (s), an engineering firm, a specific project, a municipality, or a specific municipal or industrial facility that has made significant accomplishments in the field of biosolids technology and management practices within the boundaries of the State of Texas.

The City of Denton Pecan Creek Water Reclamation Plant Biosolids operation was recommended for this award by outside engineering consulting firms. The City of Denton has been successfully marketing its Dyno Dirt biosolids compost since 1994, and over the ensuing 20 plus years, has developed a sophisticated approach to marketing that leverages the benefits of biosolids for Texas soils and water conservation, and diverts organic wastes from landfills. The program has been an unqualified success by any metric. The initial product line has expanded from two products (Dyno Dirt compost and Dyno Chips, a mulch) to a total of 9 products (including 3 variations of Dyno Dirt). Sales have increased from \$19,000 in 1997 to over \$6 million since the program's inception, while diverting more than 1 million cubic yards of material from the landfill.

The success of the program is due to the commitment of City staff to product quality, customer needs, and creative marketing approaches. For example, the current offerings of 9 different products were developed in direct response to customer requests. And the multi-faceted approach to marketing - built not only upon customer trust, but also on partnerships, promotional items and well placed advertising - ensures that the City's biosolids are beneficially used. The products are marketed to a diverse customer base that includes homeowners, landscapers, nurseries, community gardens, schools, TxDOT, City departments (such as Parks and Recreation), and other municipalities. Customers can purchase the materials from bags at retail outlets or from specially-designed sales facility located at the compost facility.

Together with the City's attention to customers' needs, these efforts have resulted in one of the top biosolids marketing programs in the country, and the Dyno Dirt program was recently featured in a WEF webinar as a role model for marketing programs. In addition, the Treatment Plant Operator (TPO) magazine published an article in the January 2016 issue on the compost operation.

The Dyno Dirt product begins with biosolids generated at the City of Denton's 21 mgd Pecan Creek Water Reclamation Plant, yard wastes from City residents and clean wood wastes.

Wastewater solids from the wastewater treatment process are anaerobically digested, dewatered and conveyed by front end loaders to the plant's composting area for windrow composting.

Using this process, the biosolids and woody materials are composted in 400-ft long piles, each about 18-ft wide and 5-ft high. The materials are initially blended by a specialized windrow turner, which is also used to turn the material throughout the composting process. The blended materials remain in the pile for about 28 days to meet EPA and TCEQ stabilization requirements. At the end of that period, the compost is transported to static piles for curing and then screening.

The City of Denton compost operation has been in operation for over 20 years and is a successful example of beneficial use of biosolids by using them to produce compost rather than sending the biosolids to the landfill. Denton has proved that such a program can be a win-win for all parties, and sets an example for other utilities to follow.

EXHIBITS

1. WEAT Award Notification Letter
2. Award Nomination Submittal

Respectfully submitted:
P. S. Arora, P.E.
General Manager of Wastewater Utilities