City of Denton



City Hall 215 E. McKinney St. Denton, Texas 76201 www.cityofdenton.com

Legislation Text

File #: COE17-010, Version: 1

Agenda Information Sheet

DEPARTMENT: Environmental Services and Sustainability

CM/ ACM: Howard Martin, 349-8232

Date: February 6, 2017

SUBJECT

Receive a report; hold a discussion regarding follow-up questions about landfill emissions reported in the draft 2015 Greenhouse Gas Inventory.

BACKGROUND

On January 17, staff presented the draft 2015 City of Denton Greenhouse Gas Inventory to the City Council Committee on the Environment, for discussion. The 2015 inventory will be the 4th GHG inventory for the City, and reports emissions in equivalent CO₂ for both municipal operations and for the community as a whole. Key trends discussed include a continued reduction in both municipal and community overall GHG emissions. Overall municipal GHGs have fallen 8% since 2002, with a 25% reduction since 2006, and overall community emissions have fallen 1% since 2012, and 13% since 2006. Community emissions per capita have dropped by 30 % from 2002 to 2015.

Significant reductions in electricity related emissions and municipal fleet emissions have been achieved over time; however, staff had noted that the decrease in landfill emissions from 2006 to 2011 was followed by a 7% increase in landfill GHG emissions from 2011 to 2015 (see p.6 of draft inventory). Staff was directed to investigate and report potential explanations for this increase. Solid Waste and Recycling staff clarified that this increase is very likely due to the 57% increase in waste collected over this time period. The landfill employs many best practices to minimize emissions including comprehensive gas collection, landfill to energy conversion, regular cover inspections, and utilization of surface compost to serve as an emission biofilter. Gas not used in the landfill methane to energy plant is flared (combusted), which is approximately 99% efficient in converting methane to CO₂, reducing the global warming potential. It is worth mentioning that the City's landfill draws hundreds of visitors each year from around the country and the world who come to study best practices in landfill management, including emission reduction strategies (see p.8 of revised draft GHG Inventory).

EXHIBITS

- 1 DRAFT 2015 GHG Inventory
- 2 DRAFT 2015 GHG Inventory Appendices

Respectfully submitted:

File #: COE17-010, Version: 1

Katherine Barnett White Sust & Projects Supervisor <javascript:;>

Prepared by: Kathy Jack Conservation Program Coordinator