From: Patrick Dube
To: GHGInventory

Subject: Comments: Inventory of U.S. Greenhouse Gas Emissions and Sinks

**Date:** Monday, March 13, 2017 12:59:25 PM

## **General comments**

-Change "sewage sludge" to "biosolids" throughout the document to be more in line with EPA's own preferred nomenclature.

# **Specific Comments**

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# Page 6-47 line 17

-The land application of biosolids have been shown to significantly increase soil organic carbon. (citations below)

Brown, S., K. Kurtz, A. Bary, and C. Cogger. 2011. Long-term effects of organic amendments on soil carbon storage and physical properties. Environ. Sci. & Tech. dx.doi.org/10.1021/es2010418 Rostagno, C. M.; Sosebee, R. B., Surface application of biosolids in the Chihuahuan Desert: Effects on soil physical properties. Arid land research and management 2001, 15 (3), 233-244.

Tian, G., T.C. Granato, A.E. Cox, R.I. Pietz, C.R. Carlson, Jr., and Z. Abedin. 2009. Soil carbon sequestration resulting from long-term application of biosolids for land reclamation. J. Environ. Qual. 38:61-74.

Spargo, J.T., M.M. Alley, R.F. Follett, J. V. Wallace. 2008 Soil carbon sequestration with continuous no-till management of grain cropping systems in the Virginia Coastal Plain. In review.

Wallace, B. M. 2008. Biosolids increase soil aggregation and protection of soil carbon five years after application on a crested wheatgrass pasture. J. Environ. Qual. 38:291-298.

#### 6-66 Line 22-23

In regard to the line "Cropland is not likely to be amended with sewage sludge due to the high metal content and other pollutants in human waste": Biosolids are safe to be land applied to cropland when following EPA's federal biosolids rule 40 CFR Part 503. Part 503 rule limits the amount of metals, pathogens and dioxins that can be applied while also outlining a process for crop harvesting, record keeping and reporting standards. The proper land application of biosolids can increase crop growth and yield while reducing fertilizer costs and improving soil health.

### 7-32 Line 11

-Replace 'www.wef.org/biosolids' with the more direct link 'http://www.resourcerecoverydata.org/'

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