December/January, 2009/10

Biosolids Division Monthly Report

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The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant while helping preserve agriculture and protect the Chesapeake Bay.



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In January, biosolids hauling averaged 1124 wet tons per day. The graph below shows the hauling by contractor for the month of January. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for January was 26.3%, and average lime dose was 18.5%.

In January WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In January a total of 524.6 tons went to compost production. Storage totals as of the end of January include 19,559 tons in Cumberland County, VA and 26,760 tons in Cedarville Lagoon.



Average Daily Hauling by Contractor for January, 2010

Average Daily Biosolids Production and Solids Content



The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of December 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European Union (EU) limits. The EU limits are considerably more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



Environmental Benefits

Due to inclement weather, 4,870 tons of biosolids went to landfills in December. All additional material that could not be placed in the fields due to inclement weather went to storage - 30,379 tons went into storage, while 2,128 tons came out of storage in December. 3217 tons of biosolids was land applied, and 1764 tons went to composting. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 138 metric tons metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 313,699 car miles off the road in the month of December (assumes 20 mpg, 19.4 lb CO2 equivalent emissions/gallon gas – EPA estimate).

January Highlights

Staff participated in a WEF National biosolids Partnership webinar and presented data on the DCWASA draft carbon footprint model, showing how the model was generated and discussing the expected impacts of future projects (digesters, ENR, etc.) and potential for available carbon credits. WEF estimates that over 1000 people participated in the webinar. The following was distributed by WEF to its membership:

NBP Free Webcast - Carbon Footprint Implications from Biosolids Management Practices

The National Biosolids Partnership (NBP), an alliance of WEF and National Association of Clean Water Agencies with advisory support from U.S. EPA will be hosting a **free webcast** on Wednesday, **January 27 from 2:00 – 4:00 pm EST.** The theme of webcast is **"Carbon Footprint Implications from Biosolids Management Practices."** This webcast will bring together wastewater utilities and regulators who will explore the regulatory environment, implications of land application of biosolids for reducing carbon footprint and costs, green aspects of biosolids processing and use, and a case study of how a utility's biosolids program got green. Participants will:

- Learn how land application affects a utility's carbon footprint;
- Understand how bioenergy options were assessed and evaluated to aid in decision-making
- Identify critical regulatory and other factors

Speakers:

- Dick Lanyon NBP Steering Committee Chair Welcome Remarks
- **Patricia Scanlan,** WEF Carbon Task Force Chair Beyond Green: Energy Production Opportunities with Biosolids
- Bob Bastian, U.S. EPA Green Regulations Update: What to Watch Out For
- Chris Peot, (DC WASA) How DC Water & Sewer Authority Assessed its Carbon Footprint for its Land Application Program
- **Bob Dominak**, (NEORSD) How Northeast Ohio Regional Sewer District's Biosolids Program Got Green
- Q&A



Map of Blue Plains Biosolids Applications and Agricultural \$'s for December 2009