# October/November, 2010

# **Biosolids Division Monthly Report**

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# **District of Columbia Water and Sewer Authority**

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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.

### **October/November 2010 Biosolids Division Report**

In November, biosolids hauling averaged 1306 wet tons per day. The graph below shows the hauling by contractor for the month of November. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for November was 26.3%, and average lime dose was 15.7%.

In November DC Water again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In November a total of 600 tons went to compost production.



#### Average Daily Hauling by Contractor for October, 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 October 2010. 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 the European Union (EU) limits. The EU limits are more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



### **Environmental Benefits**

Zero tons of biosolids went to landfills in October. The tonnage land applied coming directly from the plant and from storage facilities equaled 32,001 tons of biosolids land

applied in October. 779 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 2044 metric tons  $CO_2$  equivalent avoided emissions. This is equivalent to taking 4,163,707 car miles off the road in the month of October (assumes 20 mpg, 19.4 lb  $CO_2$  equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since January, 2007 is 67,138 metric tons  $CO_2$  equivalent.



# **November Highlights**

Staff met with Department of Energy personnel, including the Chief Engineer of the Biomass Energy program, to disseminate information on the digester project, its impact on the carbon footprint of DC, and the potential to generate renewable energy. The meeting was productive, DOE staff agreed to circulate a fact sheet within DOE in an effort to identify a program with synergies. DOE staff is interested in continuing the discussion.

Staff participated in a two day summit organized by the Water Environment Federation to examine the future of biosolids recycling. Participants in the meeting, entitled "Charting the Future of Biosolids Management", came from across the country and included academics, consultants, equipment vendors, regulators, and utilities managers. Breakout groups discussed three areas:

- 1. Regulatory Policy Drivers and Trends
- 2. Technology Drivers and Trends
- 3. Operations and Maintenance Trends

Discussions included economics, various benefits, energy, nutrients, communications, regulatory support, odor management, EMS, public perception, organized and national opposition efforts, controlling microconstituents, and many more issues. A report is due in early 2011.

# Map of Blue Plains Biosolids Applications and Agricultural \$'s for October 2010

