March, 2009

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.



April 2009 Biosolids Division Report

In April, biosolids hauling averaged 1297 wet tons per day. The graph below shows the hauling by contractor for the month of April. The second graph shows average tons recycled per day for the last 24 months. The average % solids was 26.7%, and average lime dose was 18.8%.

In April WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In April a total of 1257 tons went to compost production.



Average Daily Hauling by Contractor for April, 2009



Average Daily Biosolids Production

The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of March 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.



Environmental Benefits

No tonnage went to landfills in March. The graph below shows the benefits as compared to landfilling all the biosolids in a non-energy recovering landfill. Taking into account the fuel required to transport biosolids to the field, the net benefit is 1562 metric tons CO_2 equivalent avoided emissions. The graph shows the benefit (carbon credit) of the sequestration, the energy savings due to avoiding conventional fertilizer use, and the total of the two. This is equivalent to taking 3,54,2113 car miles off the road in the month of March (assumes 20 mpg, 19.4 lb CO2 equivalent emissions/gallon gas – EPA estimate).



HIGHLIGHTS

The state-of-the-art enclosed storage facility in Cumberland VA, along with smaller onfarm storage pads, successfully allowed staff to avoid sending biosolids to the landfill during the winter season. These facilities, built via contractual agreement by DCWASA contractors, ensure that all the biosolids produced at Blue Plains is beneficially reused. The Cumberland facility holds approximately 30,000 tons of material, and is near capacity coming out of the winter. This facility (see photos below) is fully enclosed and employs odor control. It was built by Nutri-Blend, a subcontractor of Urban Service Systems. The on-farm storage facilities are built and employed by Recyc Systems.



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

