November/December, 2009

Biosolids Division Monthly Report

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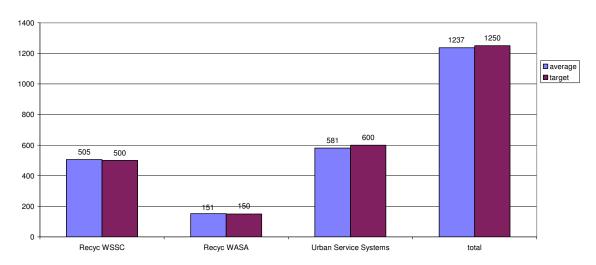
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

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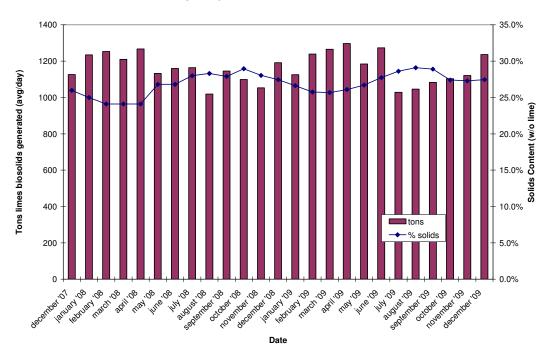
In December, biosolids hauling averaged 1237 wet tons per day. The graph below shows the hauling by contractor for the month of December. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for December was 27.7%, and average lime dose was 18.1%.

In December WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In December a total of 1740 tons went to compost production. Storage totals as of the end of December include 19668 tons in Cumberland County, VA and 24,665 tons in Cedarville Lagoon.

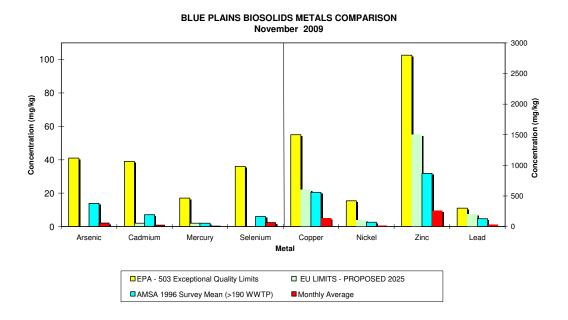
Average Daily Hauling by Contractor for December, 2009



Average Daily Biosolids Production and Solids Content

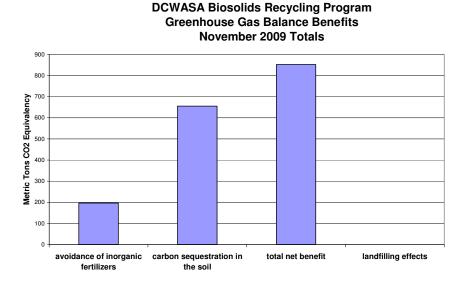


The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of November 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 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

No biosolids went to landfill in November. All material that could not be placed in the fields due to inclement weather went to storage. The graph below shows the benefits from land applied material 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 852 metric tons CO₂ 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 1,932,162 car miles off the road in the month of December (assumes 20 mpg, 19.4 lb CO2 equivalent emissions/gallon gas – EPA estimate).



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

