

November, 2009

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# Biosolids Division Monthly Report

Submitted by:

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Biosolids Division Manager

## District of Columbia Water and Sewer Authority

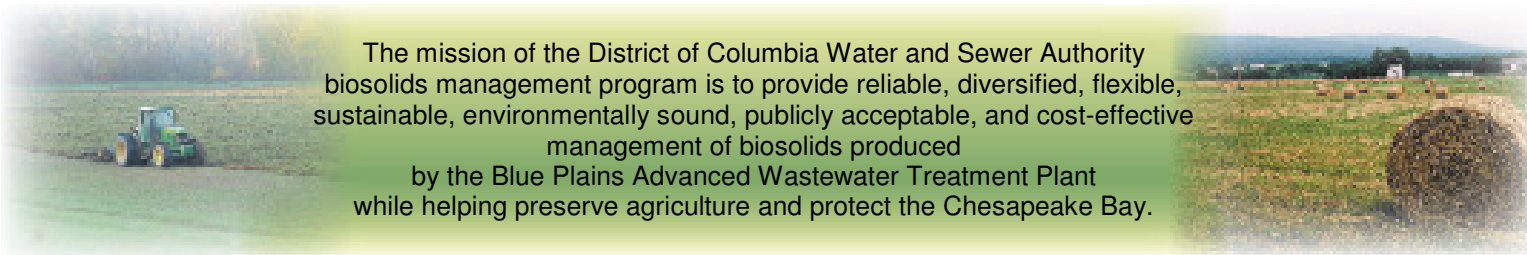
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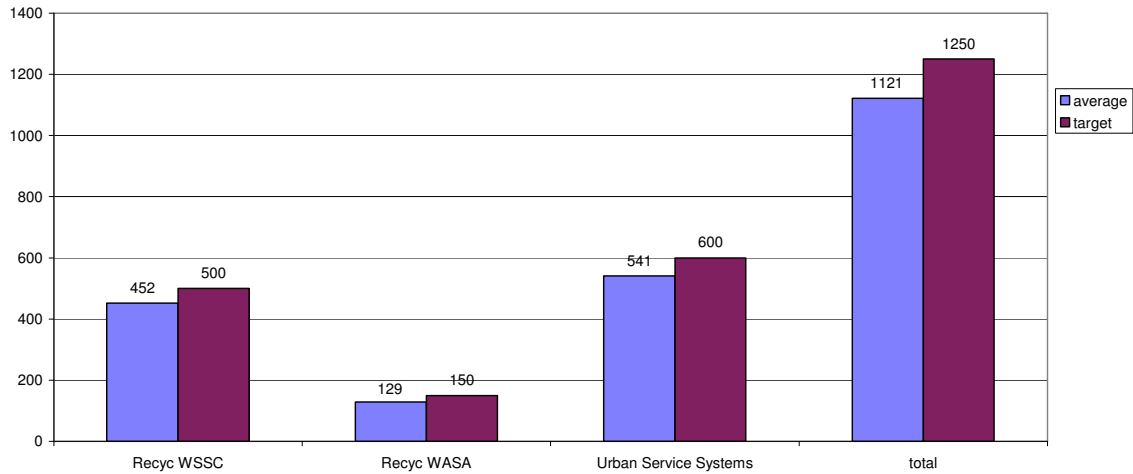
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

## October/November 2009 Biosolids Division Report

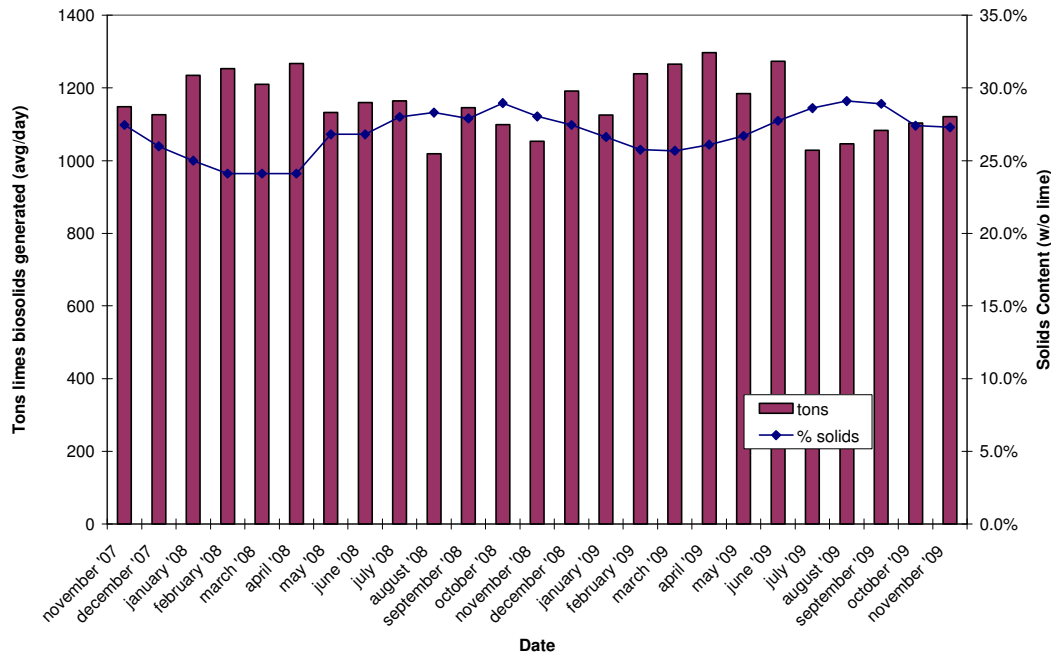
In November, biosolids hauling averaged 1121 wet tons per day. The graph below shows the hauling by contractor for the month of November. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for November was 27.3%, and average lime dose was 17.7%.

In November WASA 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 1517 tons went to compost production. Storage totals as of mid-November include 0 tons in Cumberland County, VA and 0 tons in Cedarville Lagoon. The Cumberland pad received material again toward the end of the month due to heavy rainfall.

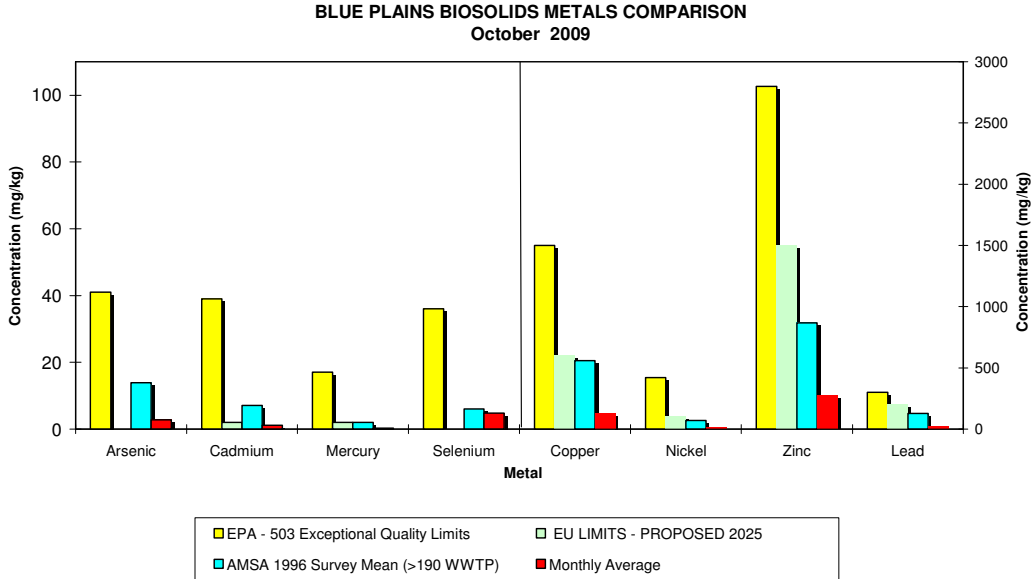
Average Daily Hauling by Contractor for November, 2009



Average Daily Biosolids Production and Solids Content



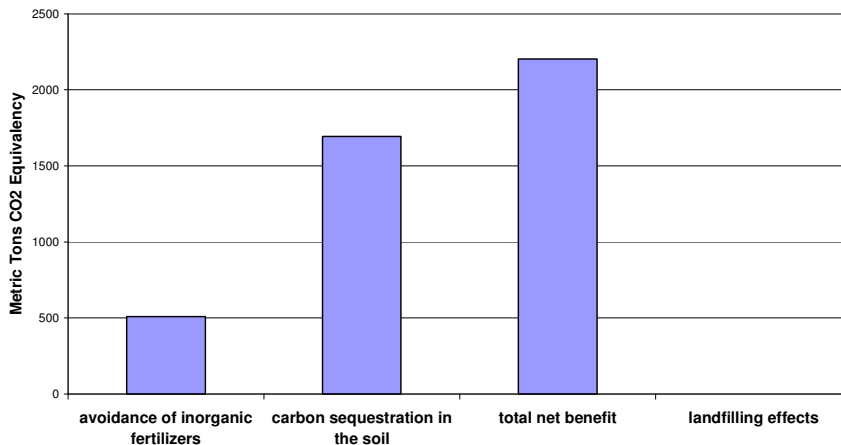
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of October 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European 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 October. 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 2203 metric tons CO<sub>2</sub> 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 4,996,121 car miles off the road in the month of October (assumes 20 mpg, 19.4 lb CO<sub>2</sub> equivalent emissions/gallon gas – EPA estimate).

**DCWASA Biosolids Recycling Program**  
**Greenhouse Gas Balance Benefits**  
October 2009 Totals



## HIGHLIGHTS

Staff participated in a WERF research call to discuss better ways to communication the risks associated with land application of biosolids to the affected public. WERF is looking for a location to pilot test a protocol for such communications. We are considering using some of the sites DCWASA land applies to in VA as a location to test this pilot protocol.

Staff participated in a Northeast Biosolids Recycling Association (NEBRA)/ New England Water Environment Association (NEWEA) annual biosolids conference in North Haven, CT. Staff prepared a paper entitled "Biosolids in Virginia – Current Status: Why and How". This paper outlined the level of public acceptance in Virginia 6 to 8 years ago, and compared it to the current status, which is quite different (better). Also discussed were the formation of the Virginia Biosolids Council, and the effectiveness of the DCWASA EMS in building trust with the regulators and with the public.

Staff participated in the dissertation proposal meeting at U of MD for DWT intern Ampun Janpengpen. Ampun has worked through his MS while here doing odor monitoring work in the solids section. Ampun's dissertation will look at the data collected on odor spikes in the solids and develop a statistical model, using plant process data, to help predict odor events, and prevent future complaints. The dissertation proposal was well received by his committee and accepted for future work.

Staff participated in a Water Environment Federation (WEF) Environmental Management System (EMS) workgroup call, designed to discuss potential changes to the National Biosolids Partnership program, with the intent of helping form a more sustainable group that is able to encourage agencies toward certification in the future. Staff is a member of the workgroup, made up of personnel from National Biosolids Partnership (NBP) certified agencies.

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

