

May/June, 2010

Biosolids Division Monthly Report

Submitted by:

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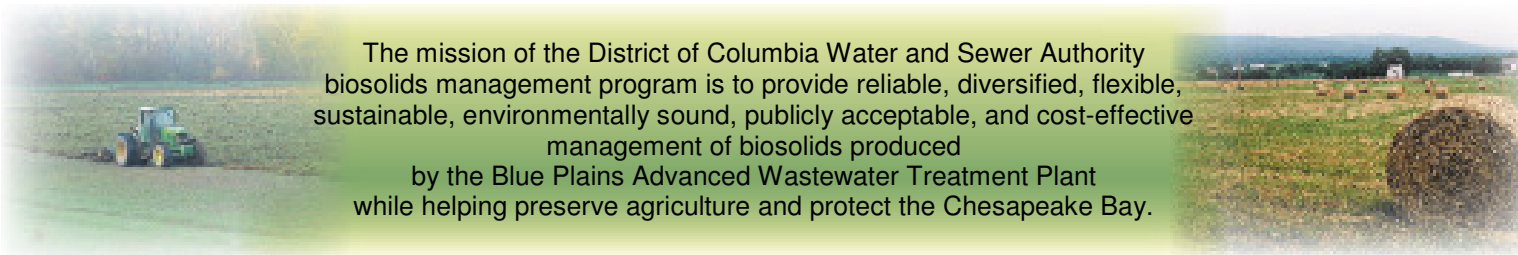
Biosolids Division

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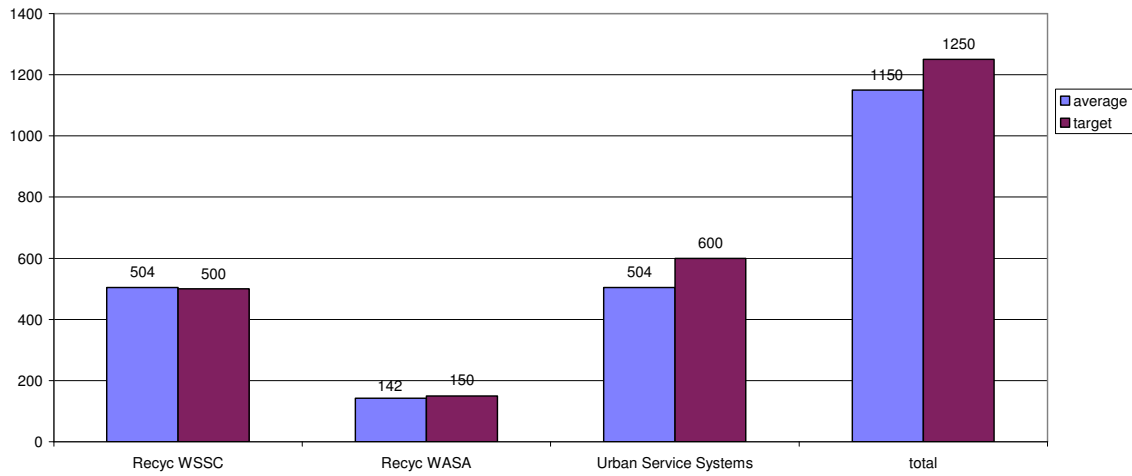
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

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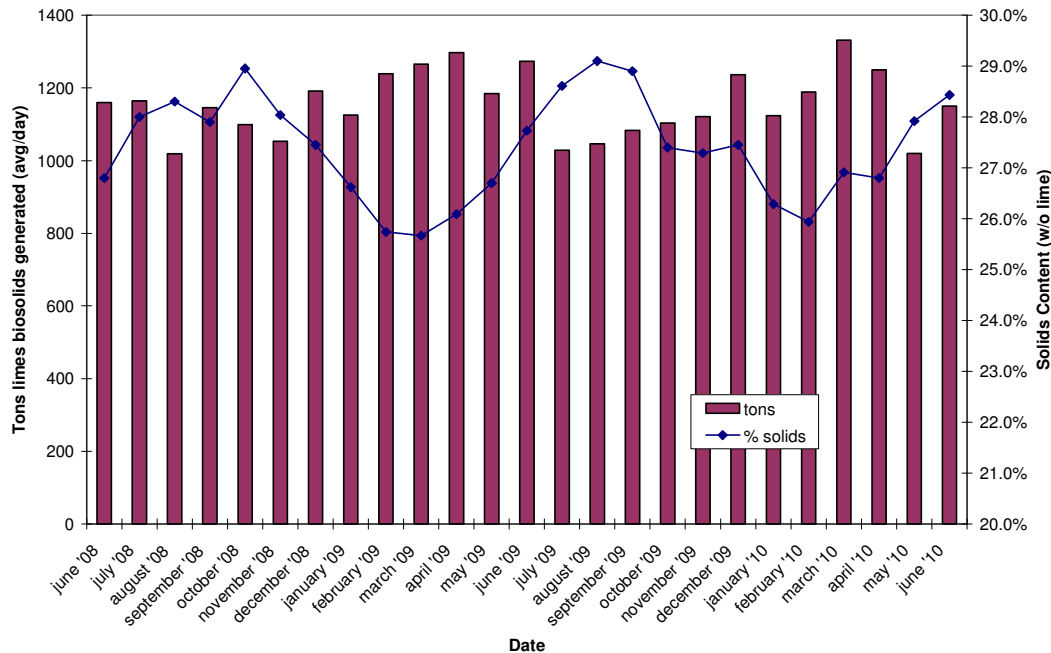
In June, biosolids hauling averaged 1150 wet tons per day. The graph below shows the hauling by contractor for the month of June. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for June was 28.43%, and average lime dose was 19.93%.

In June WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In June a total of 658 tons went to compost production. Storage totals as of the end of June include no (0) tons in Cumberland County, VA and no (0) tons in Cedarville Lagoon.

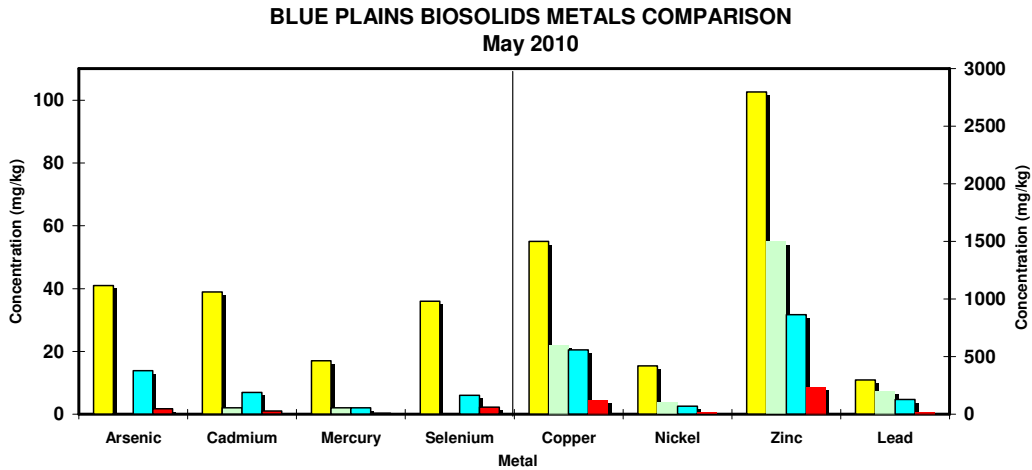
Average Daily Hauling by Contractor for June, 2010



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 May 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 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.

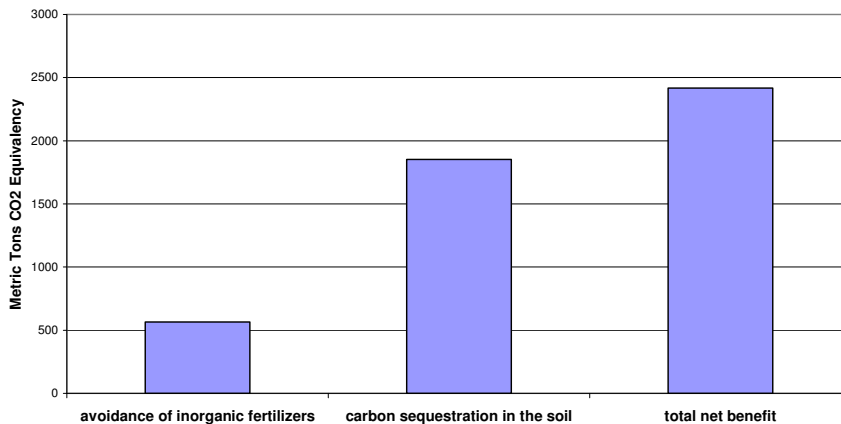


■ EPA - 503 Exceptional Quality Limits
 ■ EU LIMITS - PROPOSED 2025
 ■ AMSA 1996 Survey Mean (>190 WWTP)
 ■ Monthly Average

Environmental Benefits

No biosolids went to landfills in May. 6890 tons of biosolids that could not be placed in the fields due to inclement weather went to storage, while 16136 tons came out of storage in May. The tonnage coming out of storage plus the tonnage coming directly from the plant equals 39,386 tons of biosolids land applied in May. 1174 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 2418 metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 5,483,879 car miles off the road in the month of May (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since January, 2007 is 57,450 metric tons CO₂ equivalent.

DCWASA Biosolids Recycling Program
Greenhouse Gas Balance Benefits
May 2010 Totals



May Highlights

Staff participated in a regional biosolids to energy project kick-off meeting at Alexandria Sanitation Authority (ASA). The project will examine the feasibility and economics of a regionally sited, funded, and fed biosolids energy facility. The project, managed by CH2MHill, will look at suitable technologies, quantities available, thermodynamics and energy balance. DCWater is participating and funding a share of the study with its regional biosolids partners.

Staff attended and participated in a panel discussion at a Greening the City meeting at the offices of the Downtown Business Improvement District (BID). The meeting was held for large property owners to discuss ways to green their facilities. Other panel members included Anacostia Watershed Society (AWS) and Casey Trees. Staff presented to commercial buildings such as embassies, theaters, Smithsonian Museum member buildings and the Kennedy Center. Both AWS and Casey Trees saw good potential for collaboration concerning the use of compost. AWS does restoration projects, and is also promoting the use of green roofs. Staff also met with the Friends of the Arboretum and briefly with a UDC Extension Agent/Master Gardener regarding use of our compost product. Both have interest in using our product.

Staff participated in a regional Fats, Oils, and Grease (FOG) workshop to discuss the potential of collaborating on a regional solution for this issue. WSSC is planning on a grease handling station, yet to be sited, and a commercial entity, DC Biofuels, is planning a facility to receive these materials in the District. DC Water is planning to design the digester project so that it can be easily retrofitted to accept these wastes, which will keep them out of the sewers and the plant, and will increase digester gas production. Fairfax County staff also attended and will continue to participate in future discussions.

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

