

May, 2009

Biosolids Division Monthly Report

Submitted by:

Chris Peot, P.E.

Biosolids Division Manager

District of Columbia Water and Sewer Authority

Biosolids Division

5000 Overlook Avenue SW

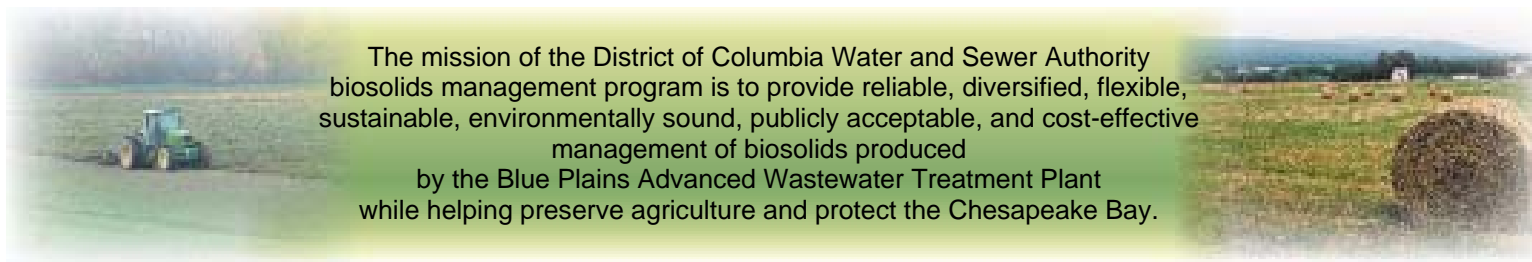
Washington, DC 20032

202-787-4329; 202-787-4226 (fax)

chris_peot@dcwasa.com



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.

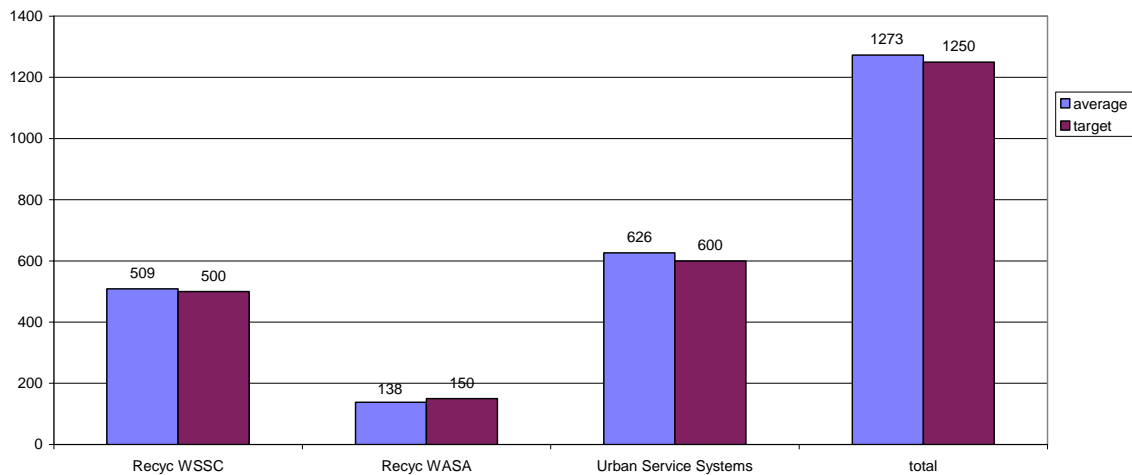


May/June 2009 Biosolids Division Report

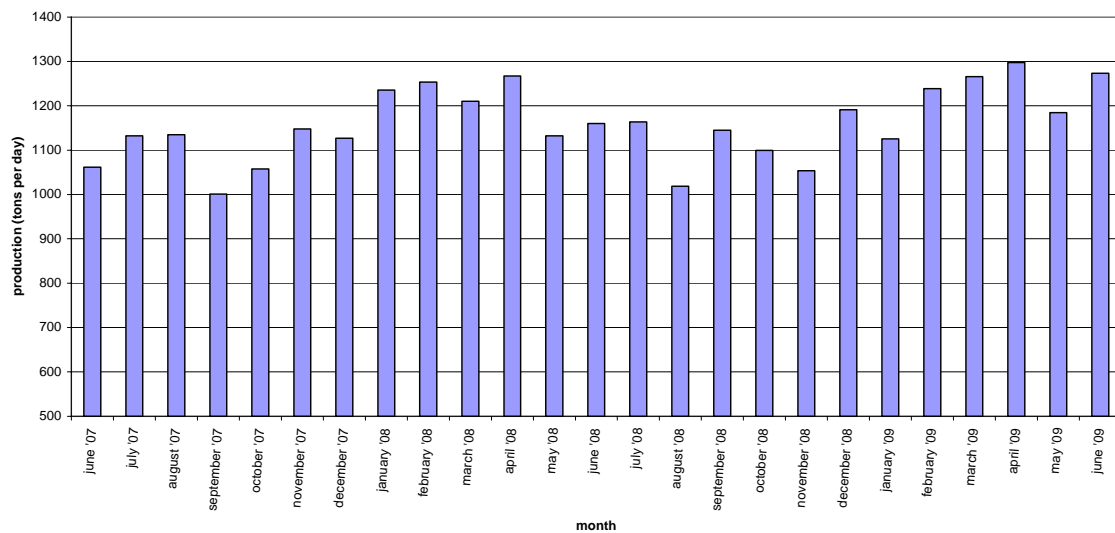
In June, biosolids hauling averaged 1273 wet tons per day. The graph below shows the hauling by contractor for the month of June. The second graph shows average tons recycled per day for the last 24 months. The average solids percentage was 28.61%, and average lime dose was 16.8%.

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 1410 tons went to compost production. Storage totals as of the end of May (this data lags a month) include 18,348 tons in Cumberland County, VA and 3,038 tons in Cedarville Lagoon.

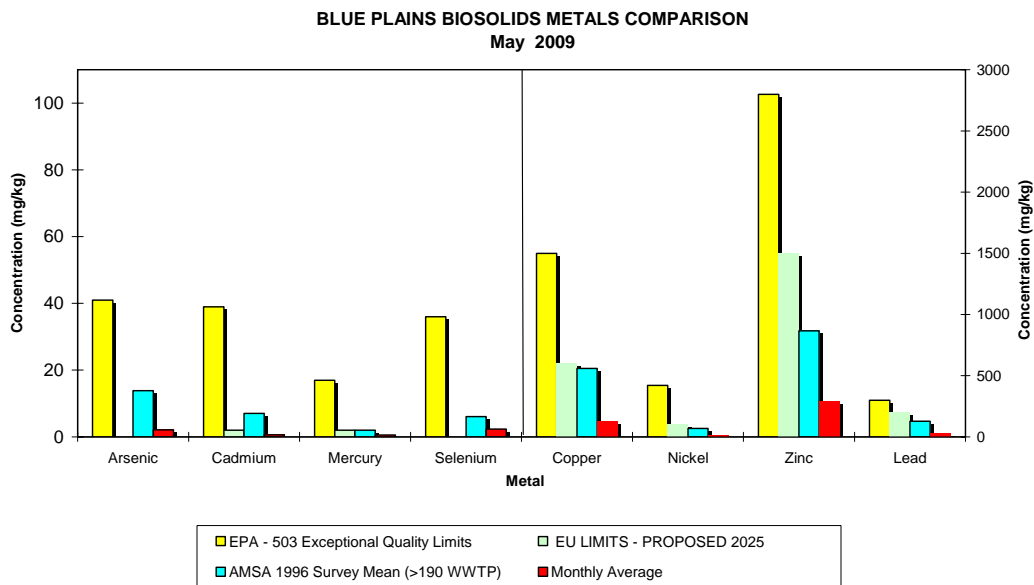
Average Daily Hauling by Contractor for June, 2009



Average Daily Biosolids Production



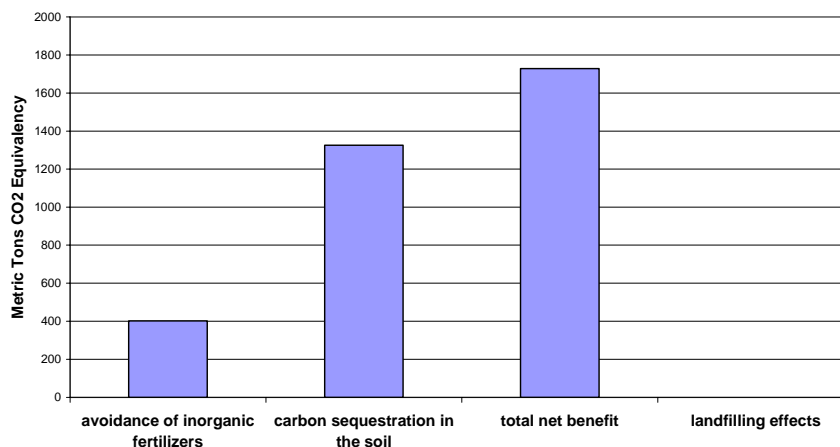
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of May 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European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



Environmental Benefits

No tonnage went to landfills in May. 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 1728 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 3,919,617 car miles off the road in the month of May (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate).

DCWASA Biosolids Recycling Program Greenhouse Gas Balance Benefits May 2009 Hauling Totals



HIGHLIGHTS

The Virginia Department of Environmental Quality (DEQ) Biosolids Expert Panel report contained several recommendations, one of which was to support research on biosolids effects on human health, wildlife, or water quality. Furthermore, the panel recommended that DEQ inspectors are ideal neutral parties for collecting such samples, which could then be analyzed by Virginia universities for parameters beyond those required by the regulation. The panel also recommended that a protocol for requesting such material through DEQ should be devised that includes chain of custody procedures and a communication plan that includes generators and researchers, ensuring that generators from whom biosolids are obtained are informed regarding the results of the study. The Virginia Institute of Marine Science (VIMS) is launching such a study. Over the next several weeks, the Virginia DEQ will be assisting in collection of biosolids samples that will be used as part of research that is being conducted by Dr. Robert Hale and Dr. Howard Kator at VIMS. The samples will be collected at various land application sites in Virginia. A summary of the sample collection procedures and research to be conducted has been provided by the researchers. Staff has requested a list of all analyses, along with sampling, preservation, and analytical protocols in order to allow for split sampling.

Staff visited the McGill Compost facility this past month to observe delivery, composting, odor control, curing, and bagging operations. The facility processes approximately 50 wet tons per day of Blue Plains biosolids to produce a Class A compost product. The facility processes biosolids for other generators, one of which has a bagged product that is sold in garden centers and hardware stores. Staff brought back samples and scheduled delivery of a truckload to Blue Plains for use by staff for a demonstration garden on site. The DCWASA gardeners planted the garden in the past month.

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

