

April/May, 2010

Biosolids Division Monthly Report

Submitted by:

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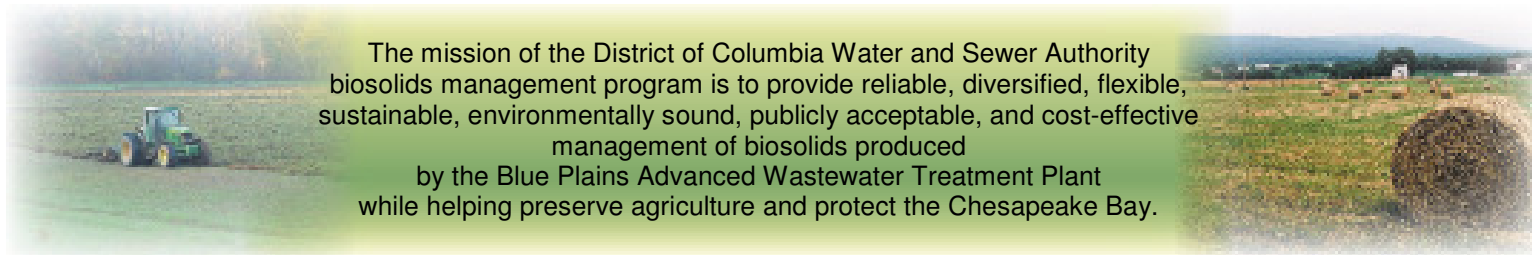
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The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced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

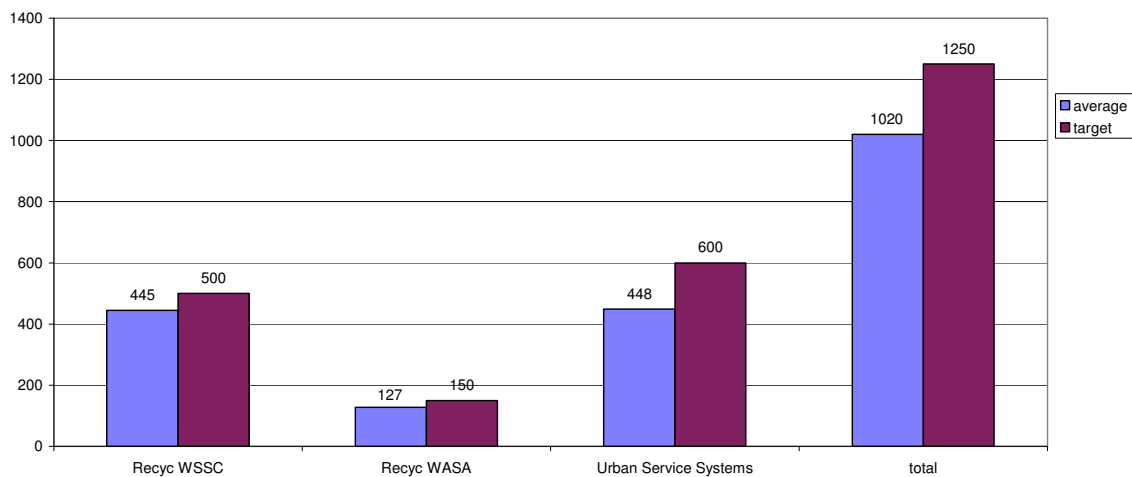


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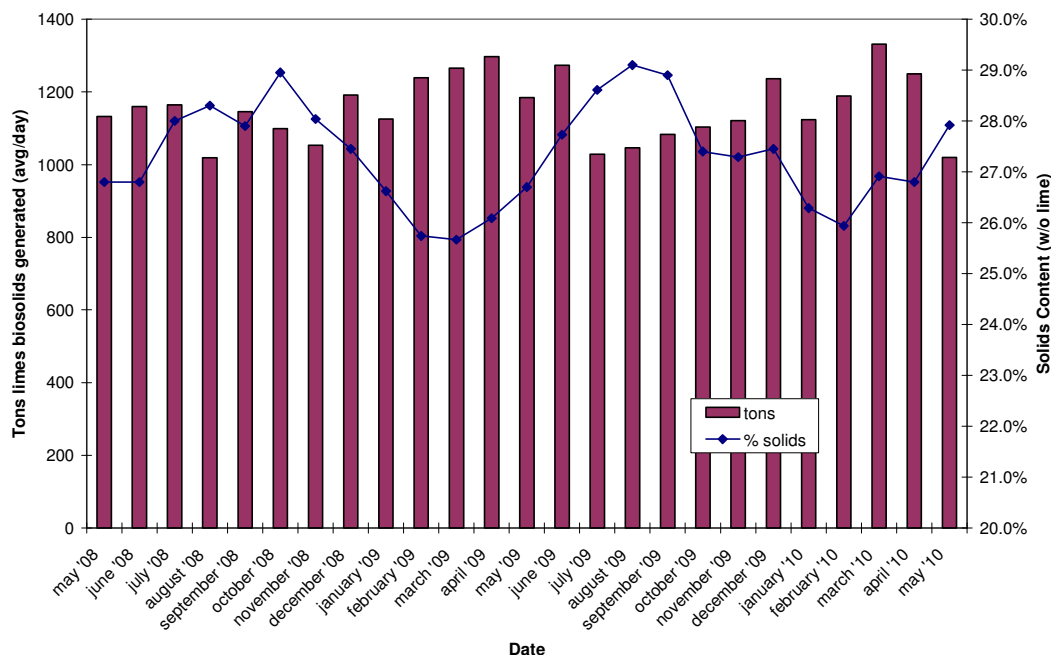
In May, biosolids hauling averaged 1020 wet tons per day. The graph below shows the hauling by contractor for the month of May. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for May was 27.92%, and average lime dose was 17.3%.

In May WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In May a total of 1174.28 tons went to compost production. Storage totals as of the end of May include 3421.61 tons in Cumberland County, VA and no (0) tons in Cedarville Lagoon.

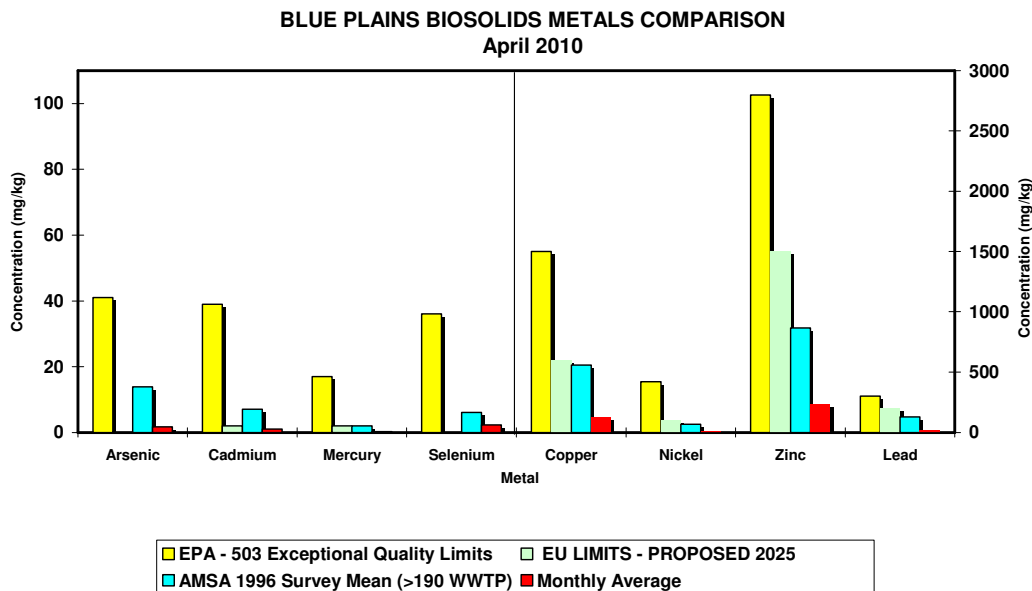
Average Daily Hauling by Contractor for May, 2010



Average Daily Biosolids Production and Solids Content



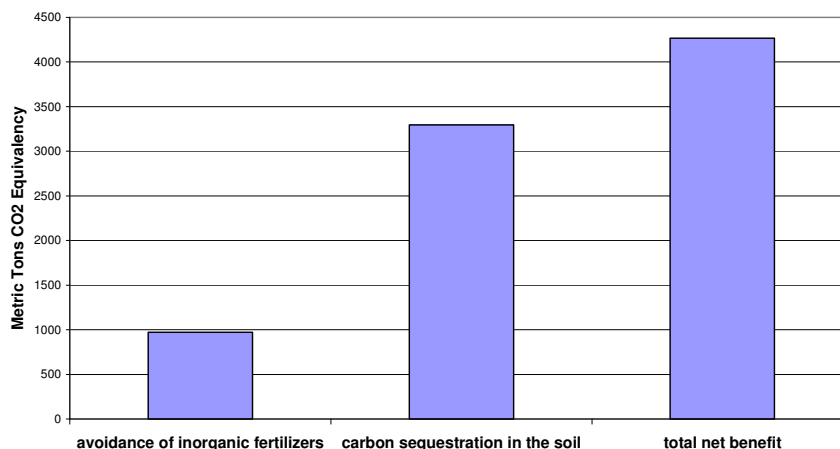
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of April 2010. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European 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.



Environmental Benefits

No biosolids went to landfills in April. 1792 tons of biosolids that could not be placed in the fields due to inclement weather went to storage, while 39,522 tons came out of storage in April. The tonnage coming out of storage plus the tonnage coming directly from the plant equals 73,992.4 tons of biosolids land applied in April. 1110 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 4267 metric tons metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 9,676,602 car miles off the road in the month of April (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since January, 2007 is 55,032 metric tons CO₂ equivalent.

DCWASA Biosolids Recycling Program Greenhouse Gas Balance Benefits April 2010 Totals



May Highlights

This past month, staff visited land application sites near Lynchburg, VA. The site visits occurred on May 6th and were scheduled in an effort to track material going to a site that in the past had been controversial. The concerned neighbor received a call prior to the application and contact was made during the operations to ensure that they knew whom to contact if there was a problem. The inspectors received no complaints from this site during or after the application. The site drew criticism during past applications of material brought down from New Jersey. That material, land applied 6 years prior, was partially digested, placed in a rail car, and limed in the field, causing high odors. When DCWASA arrived and wanted to amend neighboring fields with our material, neighbors were skeptical. We assured them that we had a strong communications procedure, as well as a system in place to produce a low odor material. To date, there has been little controversy or complaint over the application of the Blue Plains material.

Staff attended the Mid-Atlantic Biosolids Association meeting in conjunction with the NJWEA annual meeting in Atlantic City this month. A DCWASA staff member serves as president for the organization, and presided over the executive board meeting over lunch. In addition, NJWEA granted a full day session to a biosolids agenda.

Staff attended the Water Environment Federation (WEF) Residuals Conference in Savannah, GA this month. DC WASA staff presented, moderated, or co-authored 13 different papers and presentations at the conference, including subjects such as pathogen control, dewatering optimization, carbon footprint reduction, risk communication, energy management, and thermal hydrolysis. DCWASA and its projects were well represented and served to help advance the science of the field.

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

