August, 2007

Biosolids Division Monthly Report

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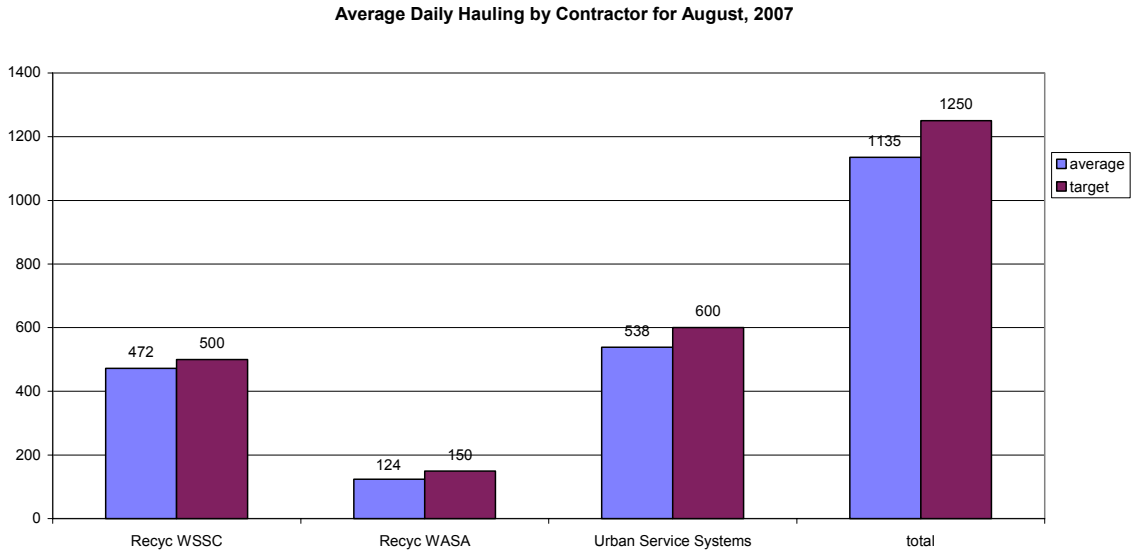
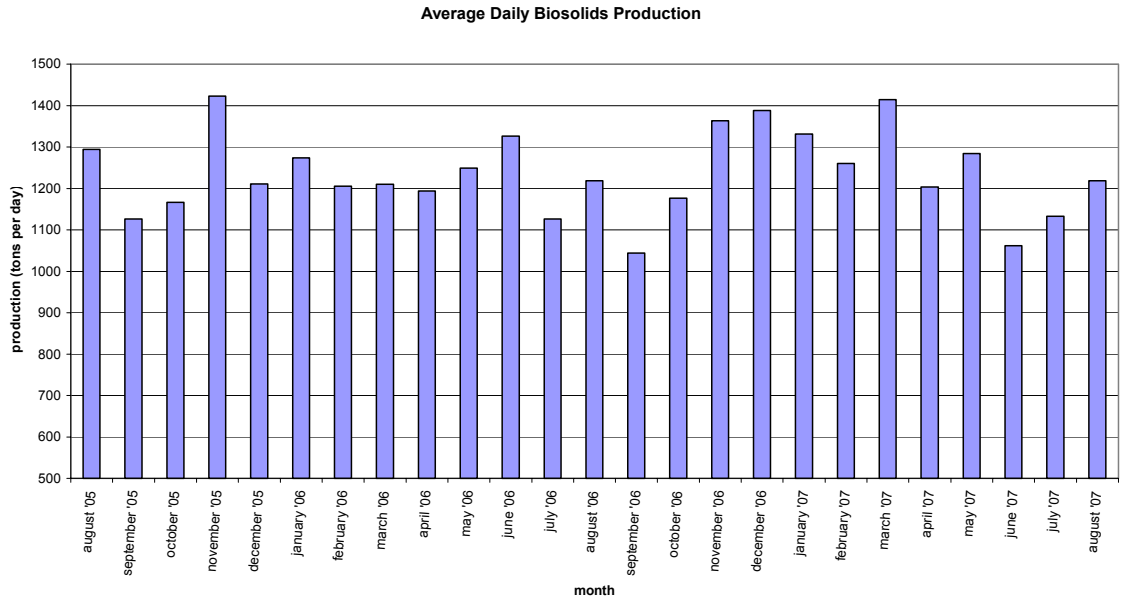
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

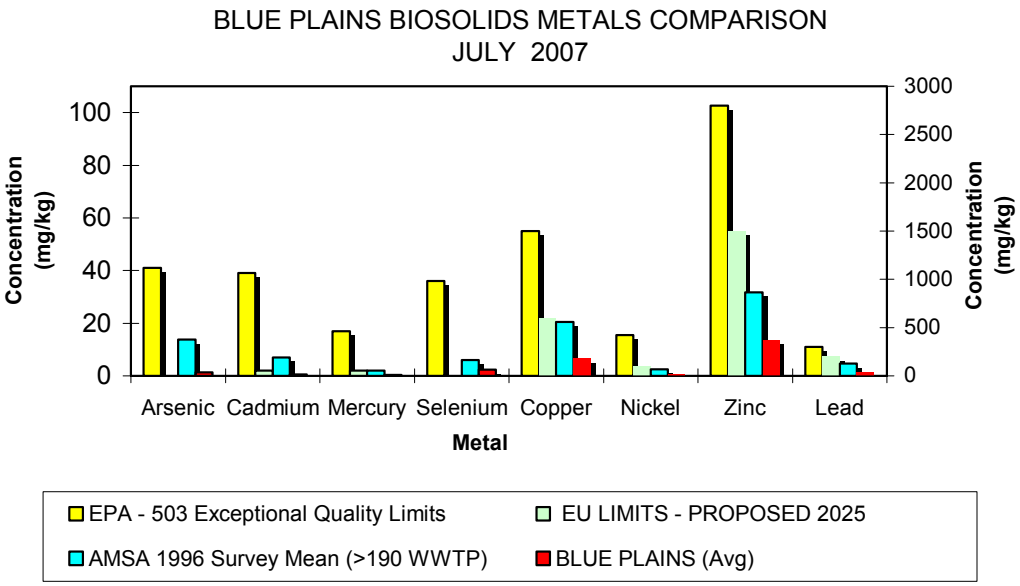
August 2007 Blue Plains Biosolids Report

In August, biosolids hauling averaged 1135 wet tons per day. The graph below shows the hauling by contractor for the month of August. A second graph shows the average daily production per month for the previous 24-month period. The average % solids for the month was 26.9% and average daily lime delivery was 39.5 tons per day. Average lime dose for the month was 14.8% on a dry weight basis.

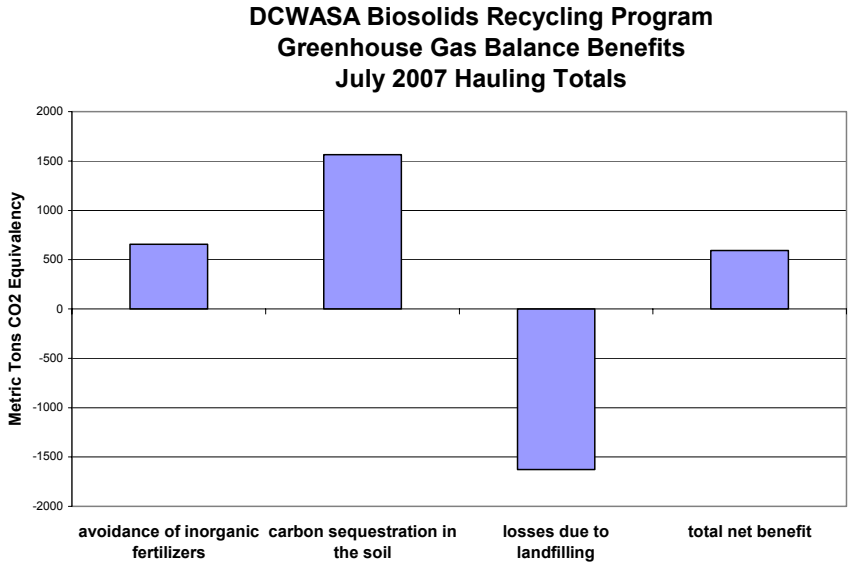




The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2007. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European Union (EU) limits.



Environmental Benefits

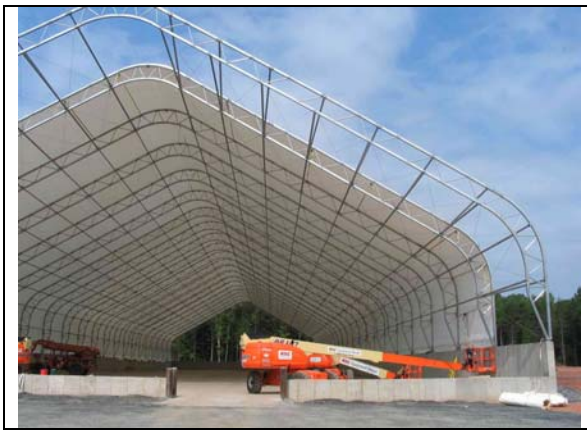


In July of 2007 staff sent 35,343 wet tons of biosolids for reuse. This includes tonnage coming straight out of Blue Plains and material coming out of storage (672 tons). 1066 tons of material went to landfills in July. The graph above shows the benefits as compared to landfilling all the biosolids in a non-energy recovering landfill. Taking into account the fuel required to transport biosolids to the field, the net benefit is 592 metric tons CO_2 equivalent avoided emissions. This is down from the past months because of the tonnage sent to the landfill. The graph shows the benefit (carbon credit) of the sequestration, of the energy savings due to avoiding conventional fertilizer use, and of the total of the two. This is equivalent to taking 1,342,209 car miles off the road in the month of July (assumes 20 mpg, 19.4 lb CO2 emissions/gallon gas – EPA estimate).

HIGHLIGHTS

On August 8th, staff attended and manned the DCWASA biosolids informational booth at the 2007 Virginia Ag Expo in Charles City, Virginia. The Ag Expo is an annual chance to meet with farmers, regulators, contractors, and equipment manufacturers. This year's expo was held on a farm that has regularly received biosolids for corn and soybean fields.

On the evening of August 16th, staff presented information to a group of citizens in Cumberland County, VA, regarding the DCWASA biosolids program. The meeting was organized by Virginia Department of Health staff, who requested DCWASA staff be present. The meeting was held to discuss renewal of several land application permits, and to discuss a new storage facility under construction by one of DCWASA's contractors. Nutriblend, as a sub-contractor to Urban Service, is building a state-of-the-art indoor storage facility capable of holding approximately three months of its daily contractual obligation from Blue Plains. The facility will allow all trucks to unload inside, and will treat all building air through a biofilter for odor control. This facility will help Blue Plains through the winter months, while making the biosolids available for local farmers at the time they need it most – spring. See photos below of the facility under construction.



On August 20th, staff met as part of the VAMWA biosolids workgroup with VA DEQ representatives Neil Zahradka, Manager of the Office of Land Application Programs, and Ellen Gilinsky, Director of the Division of Water Quality Programs. Staff expressed interest in maintaining and enhancing the current transparency of the program, and a desire to cooperate fully in order to encourage a smooth transition from VDH to DEQ. The DEQ representatives emphasized the need for cooperation, and reiterated that they would not be advocating for the practice, but would be strictly regulating the process.

On August 22nd, staff took the General Manager and the Chief Engineer to the Alexandria Sanitation Authority (ASA) to visit a pilot research project site jointly undertaken by DCWASA and ASA. The research is intended to examine a means of reducing the strength of ammonia side stream from digesters using a particular bacteria, thereby reducing methanol and aeration costs. At full scale, the potential savings over projected costs is nearly $1.5 million annually.

Map of Blue Plains Biosolids Applications and Agricultural $'s for July 2007