

October, 2007

Biosolids Division Monthly Report

Submitted by:


Chris Peot

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

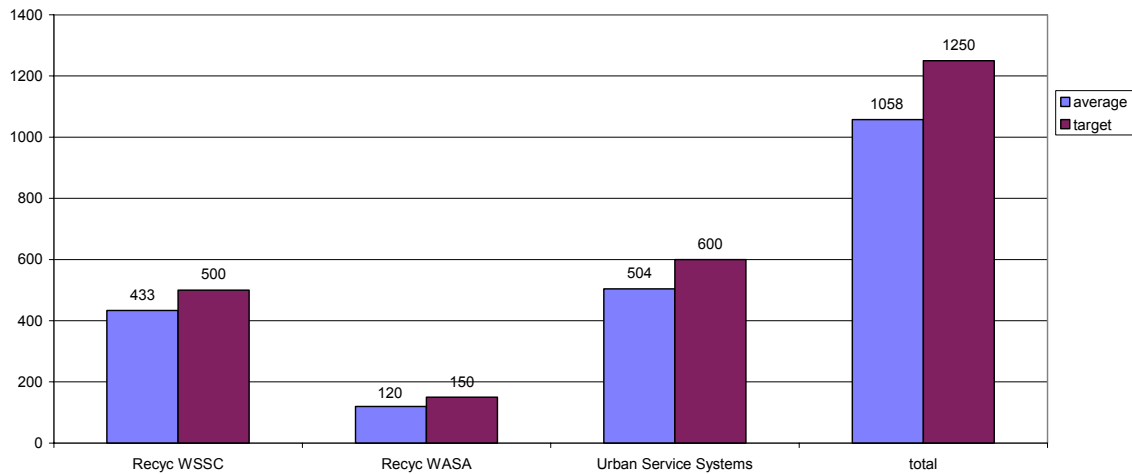


The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

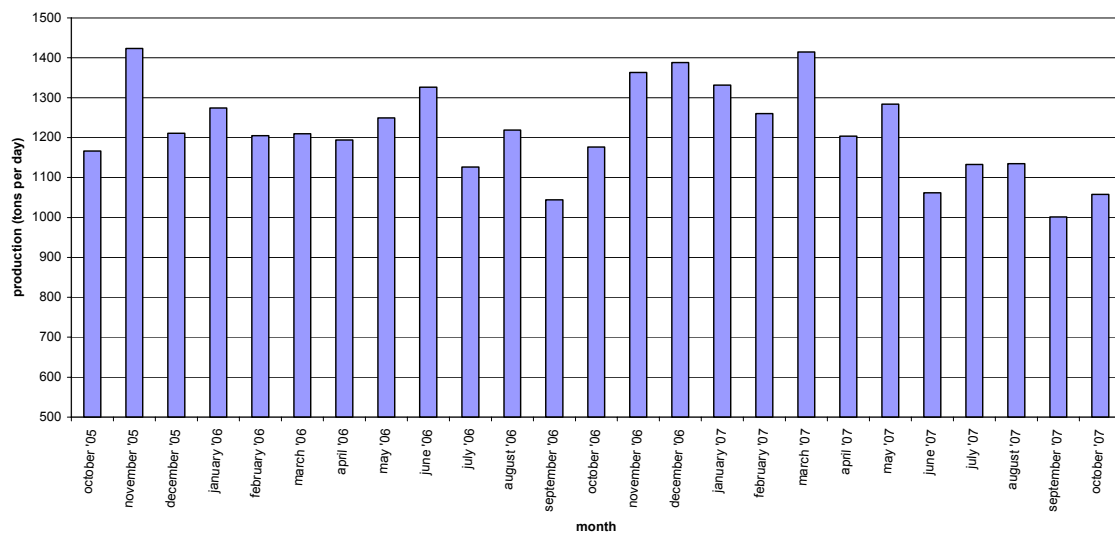
October 2007 Blue Plains Biosolids Report

In October, biosolids hauling averaged 1058 wet tons per day. The graph below shows the hauling by contractor for the month of October. A second graph shows the average daily production per month for the previous 24-month period. The average % solids for the month was 28.9% and average daily lime delivery was 70.7 tons per day. Average lime dose for the month was 19.4 % on a dry weight basis.

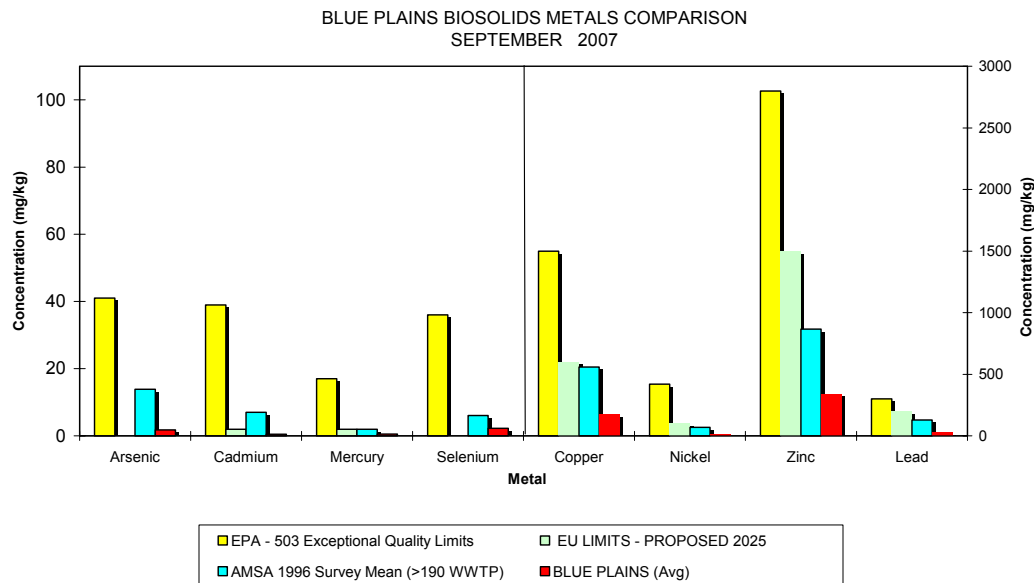
Average Daily Hauling by Contractor for October, 2007



Average Daily Biosolids Production



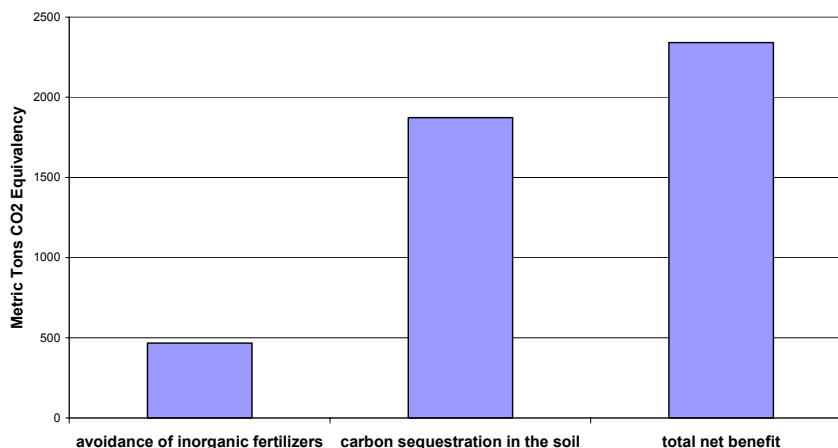
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of September 2007. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025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



Environmental Benefits

In September of 2007 staff sent 29,756 wet tons of biosolids for reuse. This includes tonnage coming straight out of Blue Plains and material coming out of storage (260.5 tons). No material went to landfills in September. 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 2341 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 5,309,101 car miles off the road in the month of September (assumes 20 mpg, 19.4 lb CO₂ emissions/gallon gas – EPA estimate).

**DCWASA Biosolids Recycling Program
Greenhouse Gas Balance Benefits
September 2007 Hauling Totals**



HIGHLIGHTS

During the 2007 Virginia legislative session, elected officials passed House Joint Resolution No. 694, requesting the Secretary of Natural Resources and the Secretary of Health and Human Resources to convene a panel of experts to study the impact of land application of biosolids (sewage sludge) on human health and the environment. In conducting the study, the panel is to consider the typical contaminant concentrations and application rates of biosolids, and shall respond to the following questions:

1. Are citizen-reported health symptoms associated with the land application of biosolids?
2. Do odors from biosolids impact human health and well-being and property values?
3. To what degree do biosolids-associated contaminants accumulate in food (plant crops and livestock)?
4. To what degree do biosolids-associated contaminants affect water quality?
5. What are the effects of an accumulation of biosolids-associated contaminants in wildlife?

In addition, the panel shall (i) perform a detailed analysis of the chemical and biological composition of biosolids; (ii) evaluate the toxic potential of biosolids constituents derived from land application to humans, agricultural products, soil organisms, and wildlife; (iii) evaluate the capacity of alternative technologies to facilitate the beneficial use of biosolids and their disposal; (iv) determine the availability, costs, and feasibility of technologies to Class B land application; (v) investigate the availability, capital and operations costs, feasibility, environmental and human health impact, and public acceptance of alternative technologies for the beneficial use of biosolids; and (vi) identify and recommend institutional and financial mechanisms for assisting localities in implementing alternative technologies at the state, local, and regional levels.

DCWASA staff is serving on the panel, and on the two subcommittees formed out of the panel thus far (environmental impacts and human health impacts). One full panel session has occurred, along with two subcommittee meetings. Staff is preparing lists of relevant literature and is helping to gather data from other generators.

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

