

August, 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

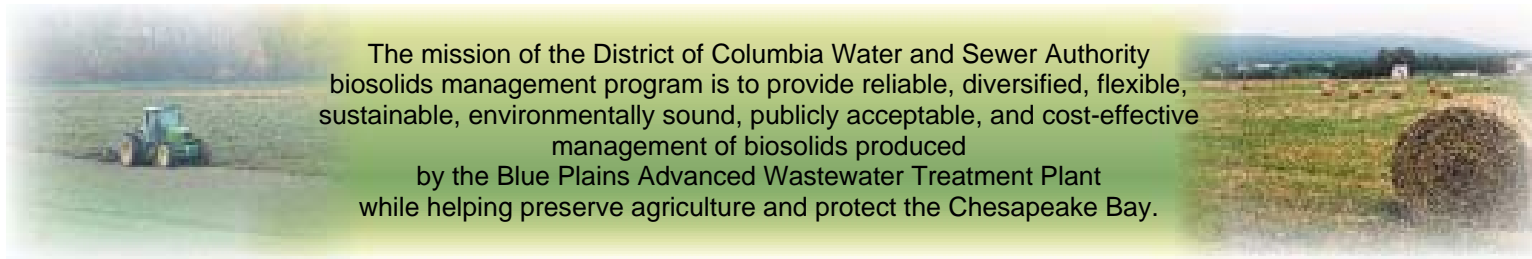
Washington, DC 20032

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.

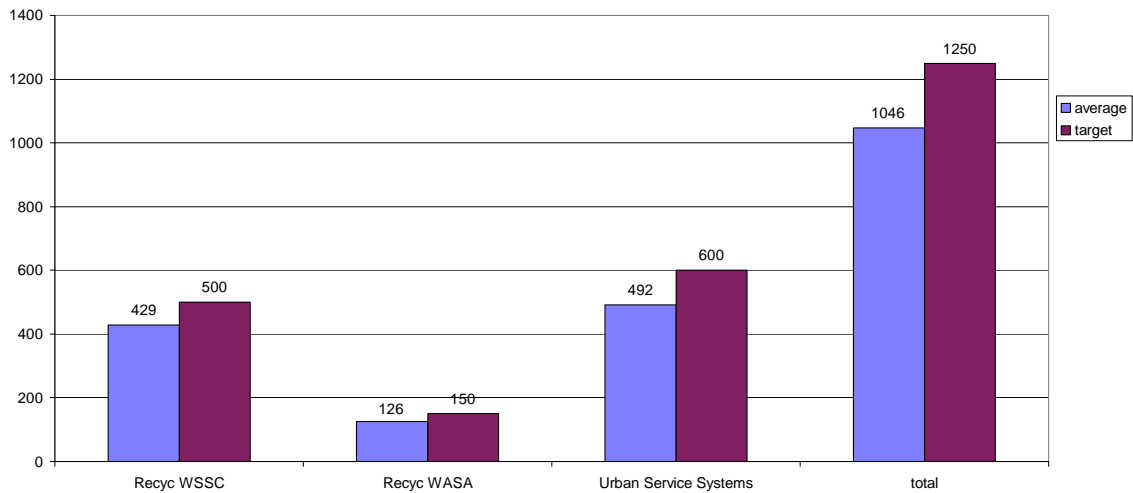


July/August 2009 Biosolids Division Report

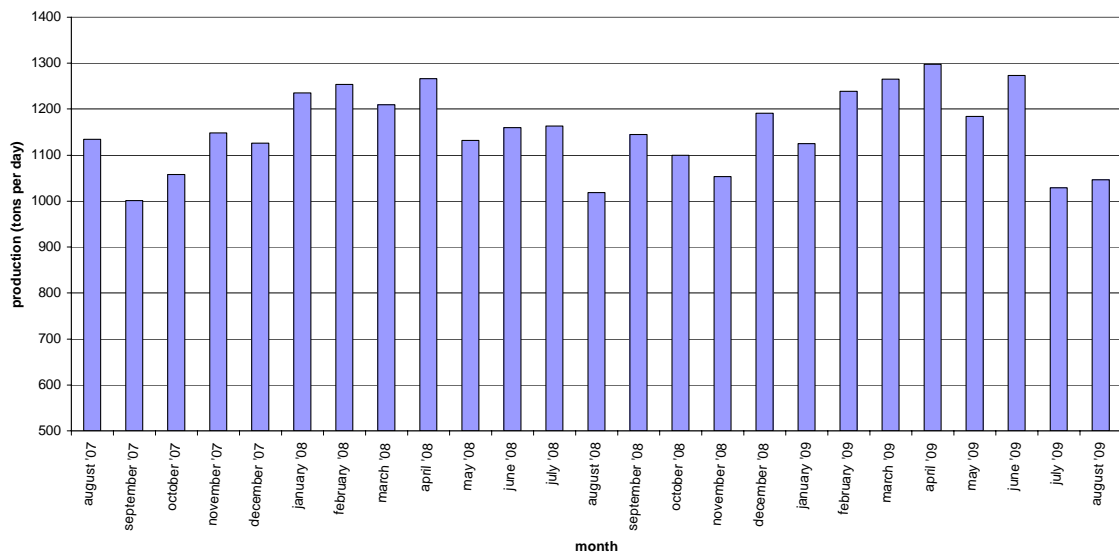
In August, biosolids hauling averaged 1046 wet tons per day. The graph below shows the hauling by contractor for the month of August. The second graph shows average tons recycled per day for the last 24 months. The average solids percentage was 28.63%, and average lime dose was 21.0%.

In August WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In August a total of 891 tons went to compost production. Storage totals as of the end of August include 0 tons in Cumberland County, VA and 8233 tons in Cedarville Lagoon.

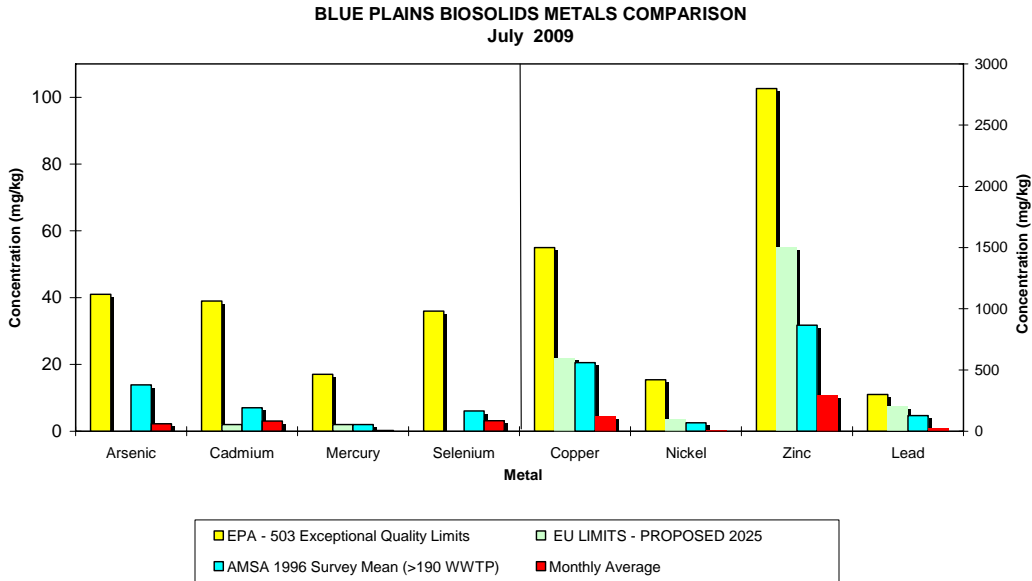
Average Daily Hauling by Contractor for August, 2009



Average Daily Biosolids Production



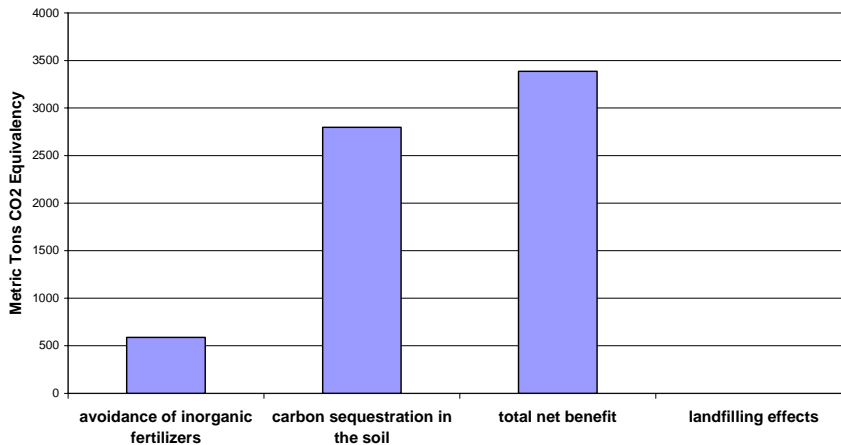
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European Union (EU) limits. 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 landfill in July. 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 3386 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 7,678,714 car miles off the road in the month of July (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate).

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



HIGHLIGHTS

During the past month, the Virginia Biosolids Technical Advisory Committee (TAC) held a meeting to discuss several issues. The TAC was formed after the Virginia Biosolids Expert Panel (EP) released its report, with the intent of implementing the findings of the EP report. The report concluded that in the 18 months it was convened, the panel was unable to uncover any evidence that biosolids was harmful to human health or the environment, but that the science was incomplete and that further studies are needed. The report also contained recommendations designed to give the public greater confidence surrounding this issue. This meeting included discussions concerning buffer distances. The next meeting will discuss nutrient management issues.

This past month, staff continued an effort to train the biosolids contractors on issues surrounding the biosolids program. This training includes review of Environmental Management System (EMS) principles, research efforts, safety and efficiency initiatives, and goals. The contractors were given literature, along with items for daily use that will remind them of the program goals – preserving agriculture and protecting the Chesapeake Bay. The attendees included truck drivers, dispatchers, and office personnel. A second session (with different contractors) is scheduled for late September.

Staff participated in a call this past month designed to launch an industry-wide group to look at the protocols used for carbon footprinting at wastewater treatment utilities. This carbon task force is hoping to propose a standardization of methodology within the industry regarding assumptions used in carbon footprint models. There are several models currently in use, and there are also some divergent views on some of the current assumptions (N₂O emissions, biogenic carbon accounting, carbon sequestration, etc.). The group realizes that we would all be better served by collaborating efforts and speaking with one voice on this important issue.

The Blue Plains biosolids compost demonstration garden is blooming, with a harvest scheduled for later this month. The corn is overhead and full of ears; the tomato plants are heavy with fruit. Herbs, squash, peppers, cucumbers, and watermelon, among other things, are doing quite well.



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

