

August, 2008

Biosolids Division Monthly Report

Submitted by:

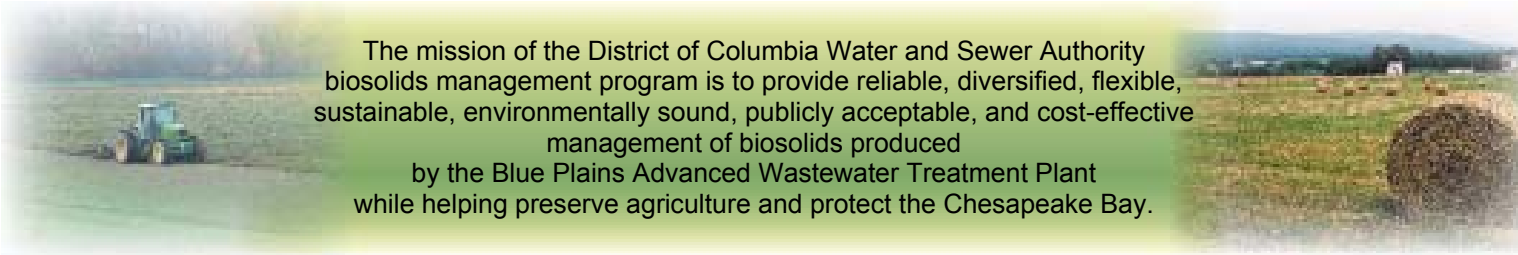
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A wide-angle photograph of a rural agricultural landscape. In the foreground, a green tractor is visible on the left, and a large, round hay bale sits on the right. The background shows a vast field under a hazy sky, with distant hills or mountains visible on the horizon.

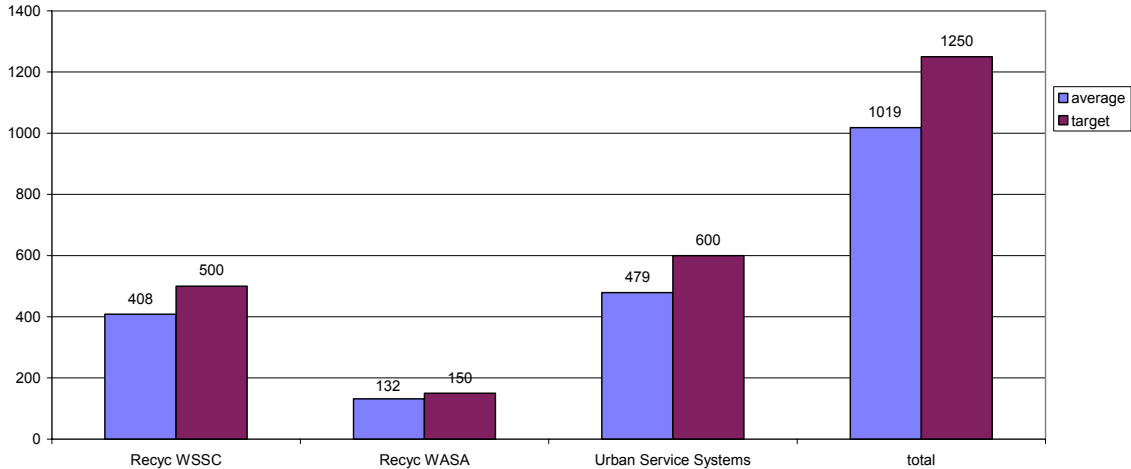
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

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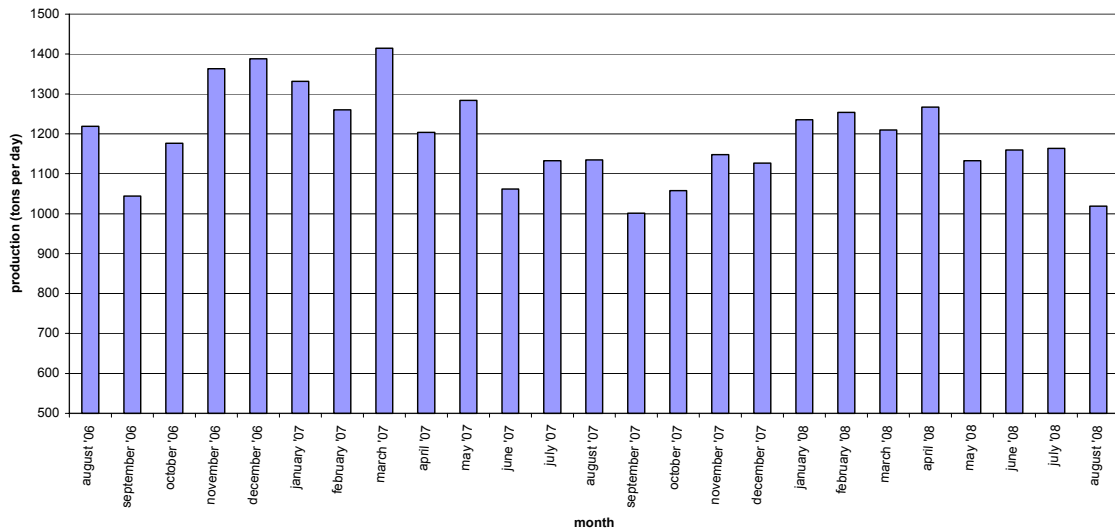
In August, biosolids hauling averaged 1019 wet tons per day. The graph below shows the hauling by contractor for the month of August. Average % solids was 27.9%, and average lime dose was 15.4%. A second graph shows average tons recycled per day for the last 24 months.

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 369 tons went to compost production.

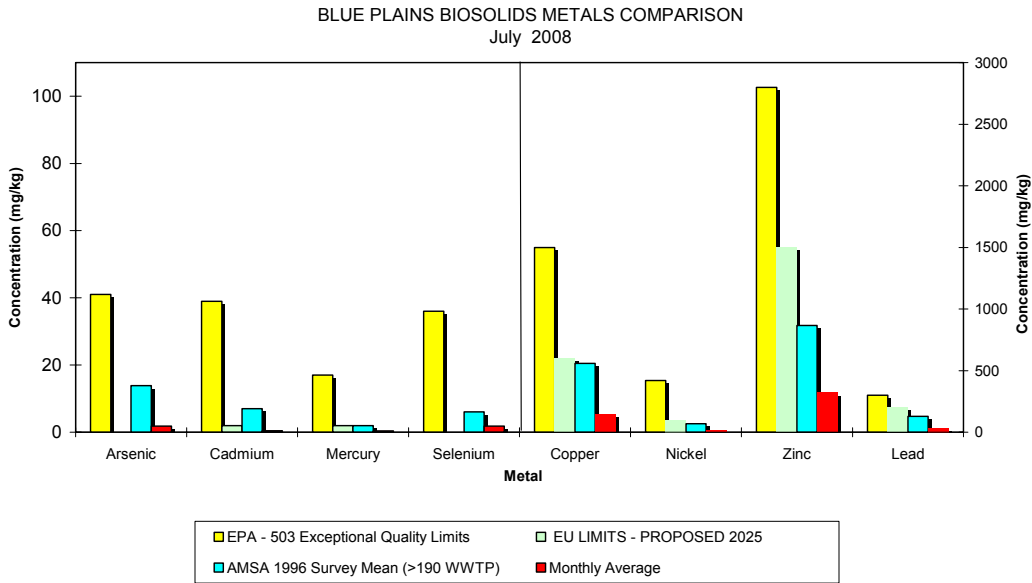
Average Daily Hauling by Contractor for August, 2008



Average Daily Biosolids Production



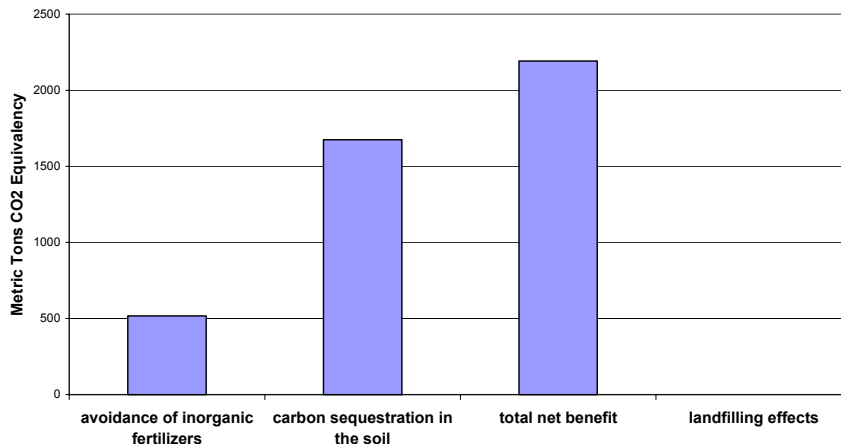
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2008. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 European Union (EU) limits.



Environmental Benefits

In July of 2008 staff sent 33,906 wet tons of biosolids from the plant. In addition, 2,240 wet tons of material came out of storage in July. No tonnage went to landfills 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 2192 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 4,970,538 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 2008 Hauling Totals**



HIGHLIGHTS

On August 14th, the first biosolids from Blue Plains were land applied in Campbell County, VA. Campbell County farmers have long wanted biosolids, but a very vocal minority in the county protested the permit approval process. DCWASA staff has attended several evening meetings over the past four years, and has opened a line of communication directly to the county officials, offering information and resources. The DCWASA team of inspectors from Maryland Environmental Services (MES) was instrumental in building a level of trust and understanding with the county officials, having made visits to the county offices and by taking officials to land application sites in adjoining counties. The date of the first application was witnessed by 4 VA DEQ officials, 4 VA VDH officials, and 4 Campbell County staff, along with representatives of Nutriblend, DCWASA, MES, Urban Service Systems, two print reporters, and a TV crew. The stories that came out of the day were balanced and positive. Here is a link to one of the stories:

http://www.newsadvance.com/lna/news/local/article/campbell_countys_sludge_spread/7434/

Also on August 14th, farmers held the VA Agricultural Expo in Dinwiddie County, VA. While staff had planned on attending in order to answer questions and man the biosolids booth, priorities were in Campbell County. The booth did travel down to the expo, and was staffed by Maryland Environmental Services. MES planned on attending with DCWASA staff, and reported back that there was 100% positive feedback from the farmers there. In past years, there have been skeptical farmers and those that were not favorable toward the use of biosolids. This year was the first year that we have had unanimous positive feedback, likely due to the fact that we have improved the product to reduce odors, our contracts are doing a very good job, and the material is worth approximately \$300/acre to the farmers (because of high fertilizer costs).

Staff attended an all day meeting at the Maryland Department of the Environment (MDE) to discuss new regulatory changes, currently in draft form.

Staff has helped to put together an alternative biosolids technology forum for September 17, in Richmond. This forum is at the request of the VA DEQ Biosolids Expert Panel. It is designed to show the different stages of development for several technologies, many of which were evaluated (and rejected due to lack of operating experience) during the Biosolids Management Plan process. Staff will present at the opening session, with an emphasis on the direction DCWASA is going (digestion) and the need for large and full scale pilot testing of many of these technologies before our industry will risk implementation. Below is the agenda in an abbreviated form. Interested participants must register, and may do so at www.viriniabiosolids.com.



Biosolids Technology Forum

Biosolids Conference, Richmond Convention Center

Main	Biosolids Technology and the Environment
Session 1	Innovative Energy Technology
Session 2	Alternative Management Options

WEDNESDAY, September 17, 2008

9:00 am - 9:30 pm		Registration
9:30 am - 10:00 am	Morning Plenary Session	Welcome and Introduction to Forum Rhonda Bowen, Hampton Roads Sanitation District Chris Peot, Washington, D.C. Water & Sewer Authority
10:30 pm - 11:00 pm		Integrating Carbon Sequestration Models into Biosolids Management Decisions Scott Subler, Ph.D., Environmental Credit Corporation
11:00 am - 11:30 am		Research and Innovative Technology - An Overview Amit Pramanik, Ph.D., Lauren Fillmore Water Environment Research Foundation
11:30 am - 11:45 am		Virginia's Perspective Jeff Corbin, Assistant Secretary of Natural Resources
11:45 am - 12:00 Noon		Overview of Afternoon Sessions

Sessions 1 and 2 - WEDNESDAY, September 17, 2008

12:00 Noon - 1:00 pm	Lunch (B15b and c)	
1:00 pm - 4:00 pm	Afternoon Sessions in B13 and B15	
	Session 1 (B14) Innovative Energy Technology	Session 2 (B15a) Alternative Management Options
1:00 pm - 1:30 pm	Gasification MaxWest	Composting - Challenges and Value Brenda Robinson Environmental Solutions, Inc.
1:30 pm - 2:00 pm	Slurry Carb E-fuel Ray Kearney Enertech	Digestion Perry Schafer Brown and Caldwell
2:00 pm - 2:15 pm	BREAK	BREAK
2:15 pm - 2:45 pm	Drying, Combustion for Energy Richard Ubaldi Infilco Degremont, Inc.	Benefits of Biosolids For Disturbed Lands Dr. W. Lee Daniels, Virginia Tech
2:45 pm - 3:15 pm	Converting Carbon to Ethanol Ray Crabbs New Planet Energy	Deep Row Trenching with Poplar Trees; Growing Fuel and Sequestering Carbon Eric Flaminio ERCO, Inc.
3:15 pm - 3:45 pm	Thermal Depolymerization Dr. Foster Agblevor Virginia Tech	Biosolids and Silviculture Dr. T. R. Fox Virginia Tech
3:45 pm - 4:00 pm	Concluding Remarks	

Map of Blue Plains Biosolids Applications and Agricultural \$'s for July 2008

