

October, 2009

Biosolids Division Monthly Report

Submitted by:

Chris Peot, P.E.

Biosolids Division Manager

District of Columbia Water and Sewer Authority

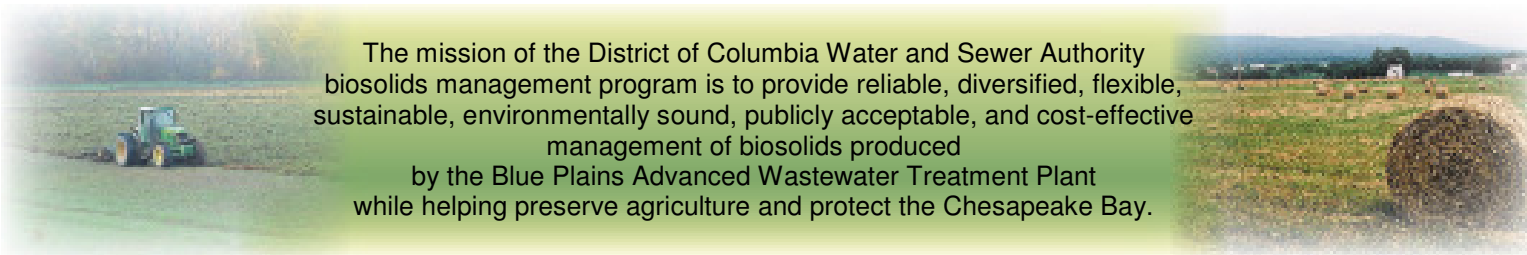
Biosolids Division

5000 Overlook Avenue SW

Washington, DC 20032

202-787-4329; 202-787-4226 (fax)

chris_peot@dcwasa.com



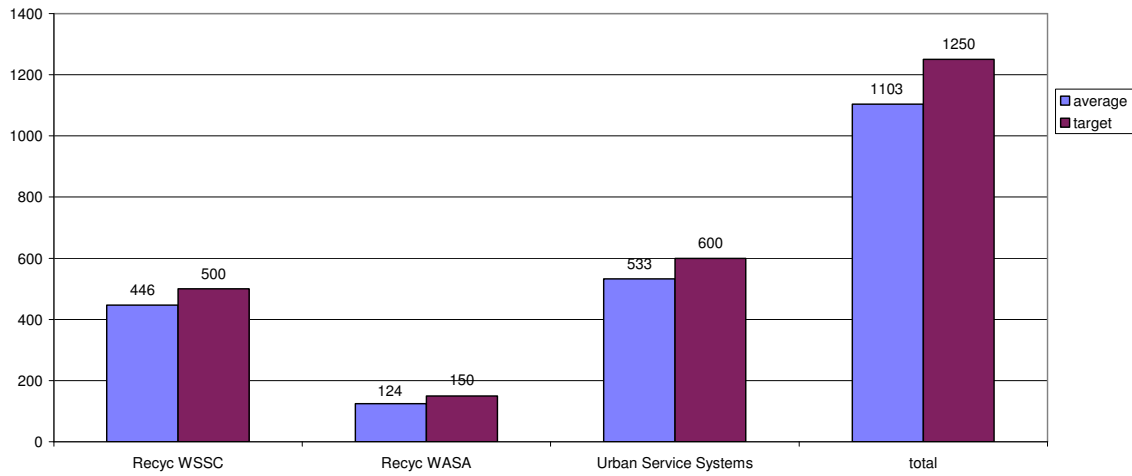
The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant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

September/October 2009 Biosolids Division Report

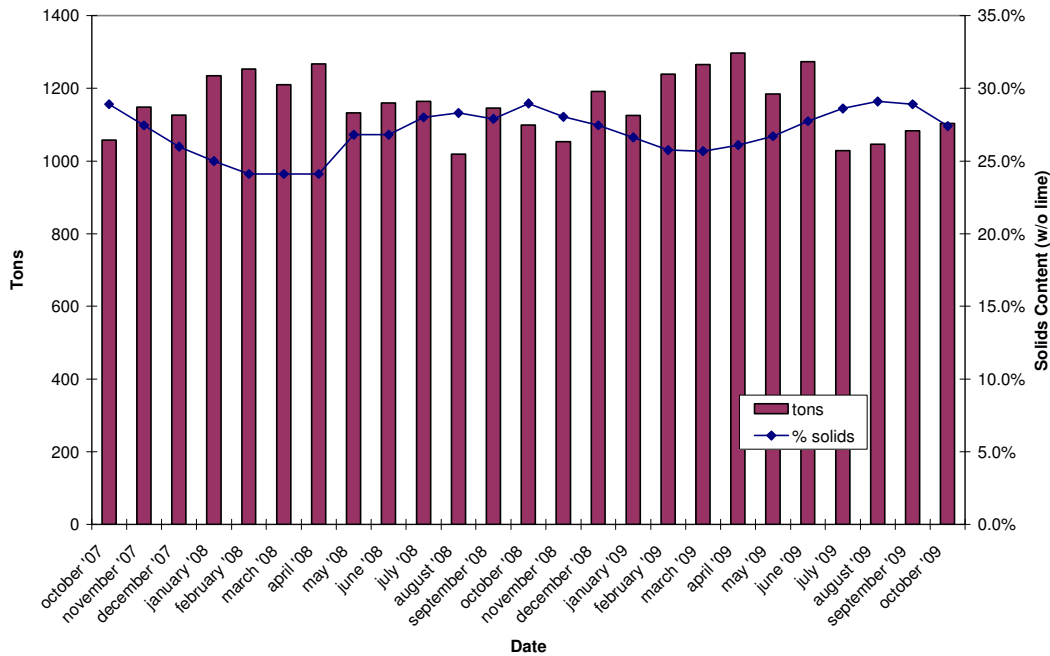
In October, biosolids hauling averaged 1103 wet tons per day. The graph below shows the hauling by contractor for the month of October. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for September was 27.4%, and average lime dose was 20.9%.

In October WASA again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In October a total of 1421 tons went to compost production. Storage totals as of the end of October include 0 tons in Cumberland County, VA and 0 tons in Cedarville Lagoon.

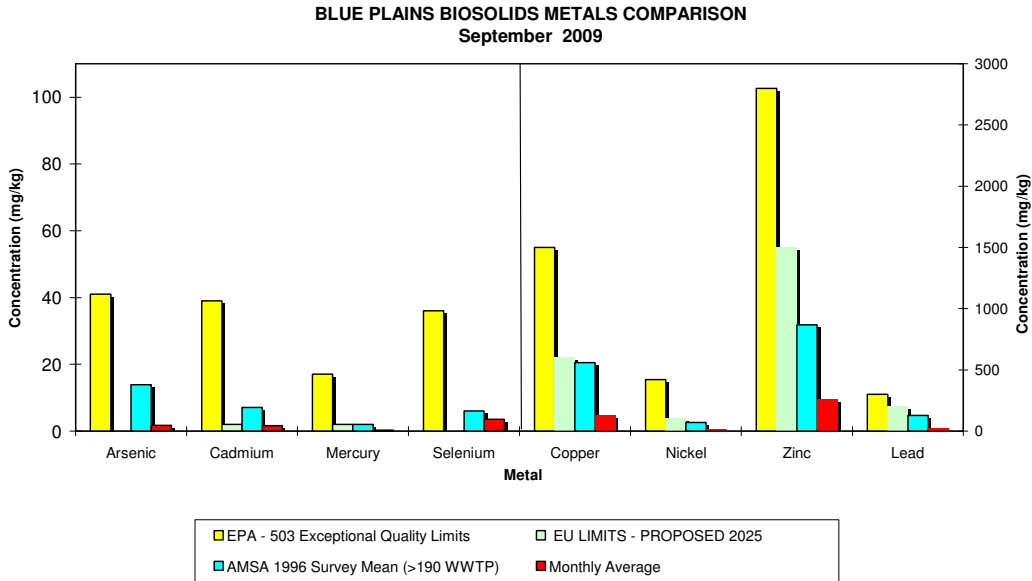
Average Daily Hauling by Contractor for October, 2009



Average Daily Biosolids Production and Solids Content



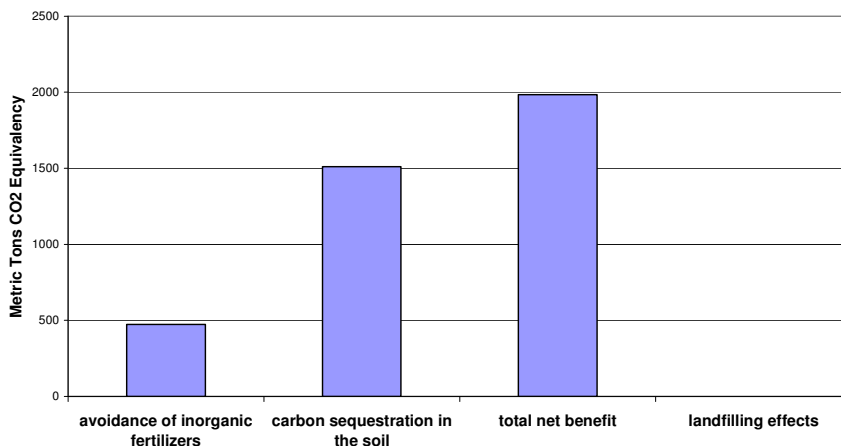
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of September 2009. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and even the proposed 2025 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 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 1985 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 4,501.051 car miles off the road in the month of September (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate).

DCWASA Biosolids Recycling Program
Greenhouse Gas Balance Benefits
September 2009 Totals



HIGHLIGHTS

Minor Nonconformance JS/09-01/Element 1 NBP EMS Element 1 requires that the management system be documented in an EMS Manual (or equivalent). Management system documentation (i.e. biosolids management program manual) does not fully meet requirements in some areas.

Minor Nonconformance JS/09-02/Element 3 NBP EMS Element 3 requires that critical control points for biosolids management activities be identified and documented. The identification of critical control does not include environmental impacts and some critical control points (e.g. preventive maintenance, field management, sustainability planning) are not consistent with the National Manual of Good Practice.

Minor Nonconformance JS/09-03/Element 3 NBP EMS Element 3 requires that critical control points for biosolids management activities be identified and documented. High, medium or low criticality is assigned to each control point, however no basis is stated for what each level means or how the criticality is determined.

Minor Nonconformance JS/09-04/Element 11 NBP EMS Element 11 requires that Emergency Plans / Procedures be in place to assure effective response to emergencies associated with biosolids management activities. Some biosolids activities at the Blue Plains plant are covered by the site Emergency Response Plan, however that plan is currently in “draft” status, leading to uncertainty about whether the information and procedures in it are up to date.

Minor Nonconformance JS/09-05/Element 17 NBP EMS Element 17 requires that management reviews include assessment of performance relative to policy commitments and established performance measures. Management Review records (e.g. 10/21/09) do not state results of assessments of performance measures or summarize performance against policy commitments.

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

September 2009 Biosolids Land Applied from Plant & Storage

