September, 2012

Biosolids Reuse Monthly Report

DC Water

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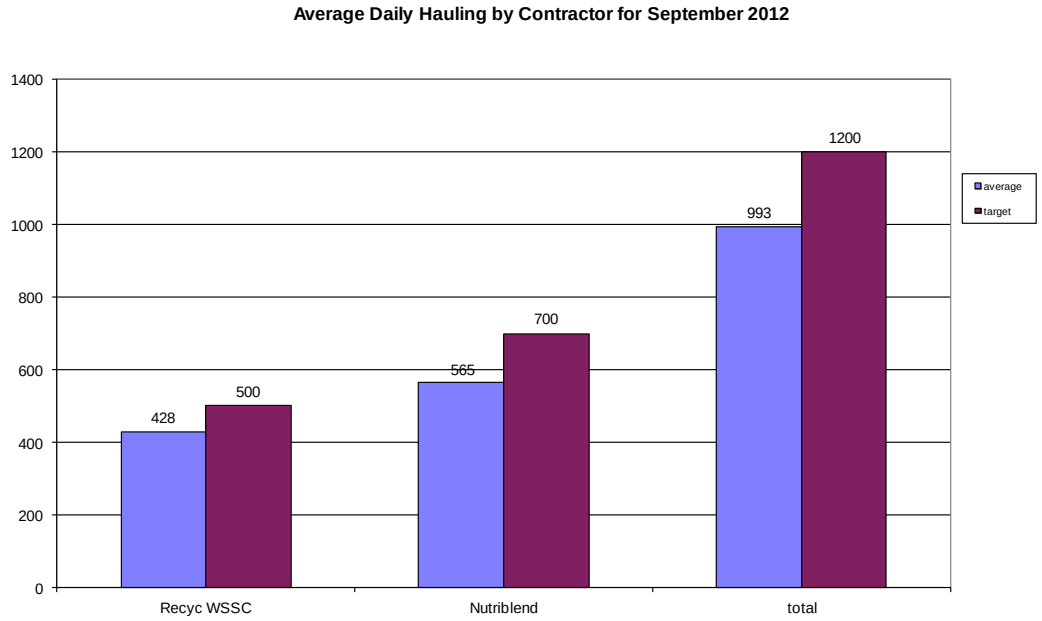
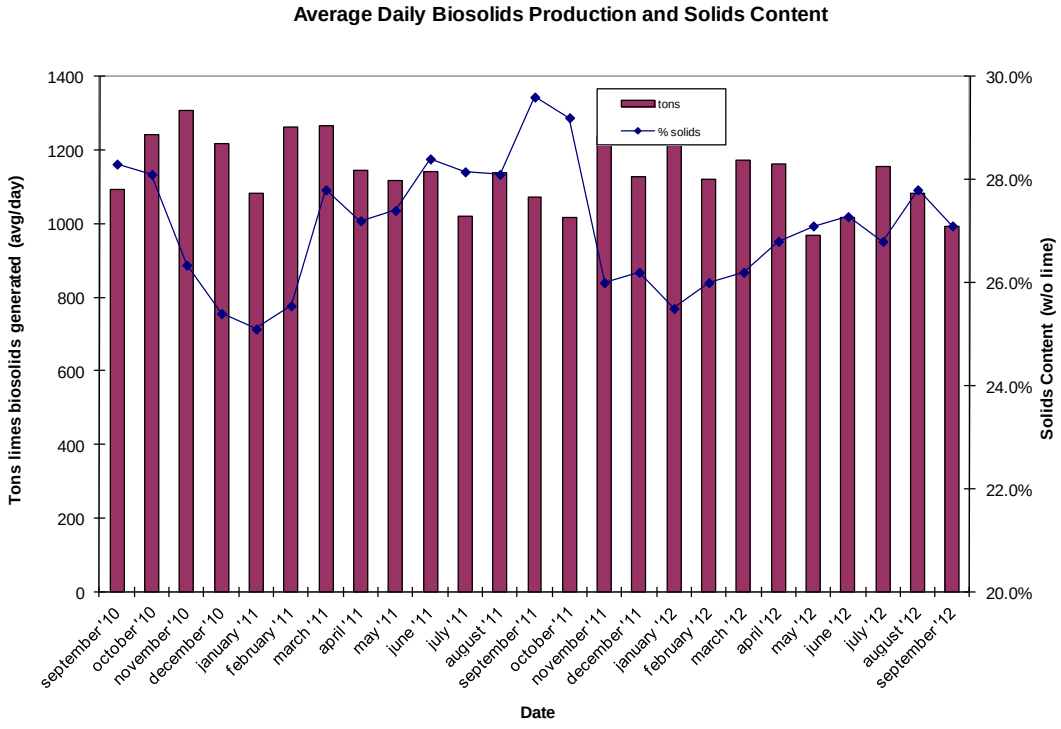
The mission of the DC Water biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective reuse of the biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and protect the Chesapeake Bay.

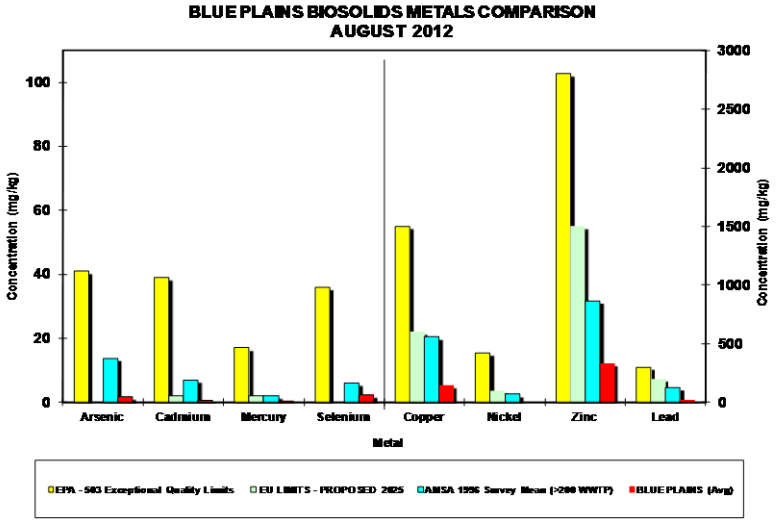
September 2012 Biosolids Division Report

In September, biosolids hauling averaged 993 wet tons per day. The graph below shows the hauling by contractor for the month of September. Average % solids for the unlimed cake was 27.1%. Average lime dose for the month was 20.7%. At the end of September the Cumberland County storage pad had 2200 tons (~25,000 tons capacity).



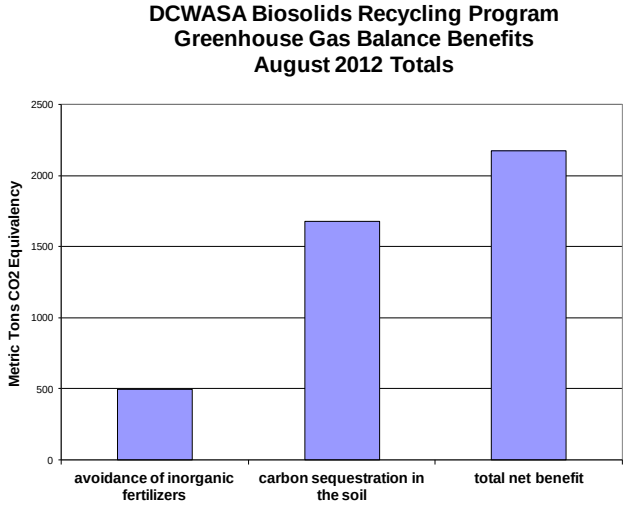


The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2012. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) limits. The EU limits are more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



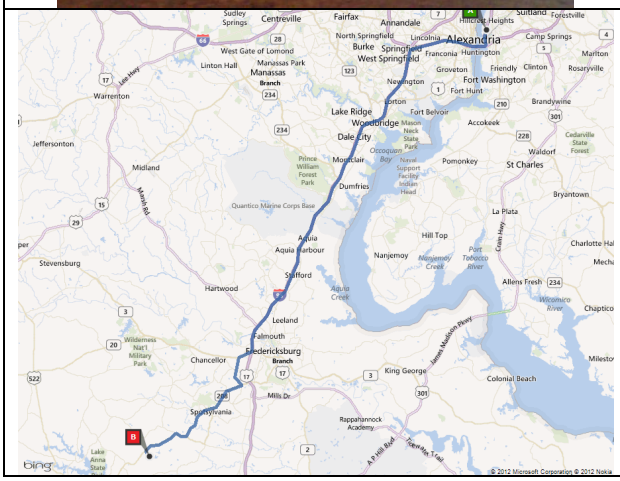
Environmental Benefits

The quantity land applied coming directly from the plant and from storage facilities equaled 34,482 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 2176 metric tons CO_2 equivalent avoided emissions. This is equivalent to taking 4,169,289 car miles off the road in the month of August (assumes 20 mpg, 19.4 lb CO_2 equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 106,987 metric tons CO_2 equivalent.



Highlights

Staff visited and the Spotsylvania County Compost Facility this past month to discuss their acceptance of Blue Plains biosolids. The DC Water biosolids reuse contractor, Nutriblend, has a subcontracting agreement with this facility. After a pilot test this summer of 8 trucks, Spotsylvania County has agreed to accept on truck per day and produce compost. The facility is 75 miles from Blue Plains, considerably closer than the facility used under the previous contract. Nutriblend will transport finished product back to DC for use in tree planting, restoration, and LID projects. Staff coordinated with the Clean Rivers Project to ensure the use of our product in the Low Impact Development Retrofit at DC Water Facilities. Staff will coordinate the delivery of 100 cy of finished compost in November for one such project at Fort Reno.



VWEA and VBC meeting

Staff participated in a technical session of the Virginia Water Environmental Association (VWEA) meeting on September 10. This session, coordinated by the Virginia Biosolids Council (VBC), covered innovations in the biosolids industry. Staff presented a summary of the Blue Plains digester project, focusing on the environmental and fiscal benefits, the planning process, and the technology used.

EPA and Thai Tours

Staff led two tours this past month. The first was with a group of technical and political leaders from Thailand, who were interested in learning about our environmental initiatives and efforts to reduce our energy use. The second tour was with a group of federal EPA officials interested in learning more about the thermal hydrolysis and digestion project.

Map of Blue Plains Biosolids Applications and Agricultural $'s for August 2012