September, 2013

Biosolids Reuse Monthly Report

DC Water

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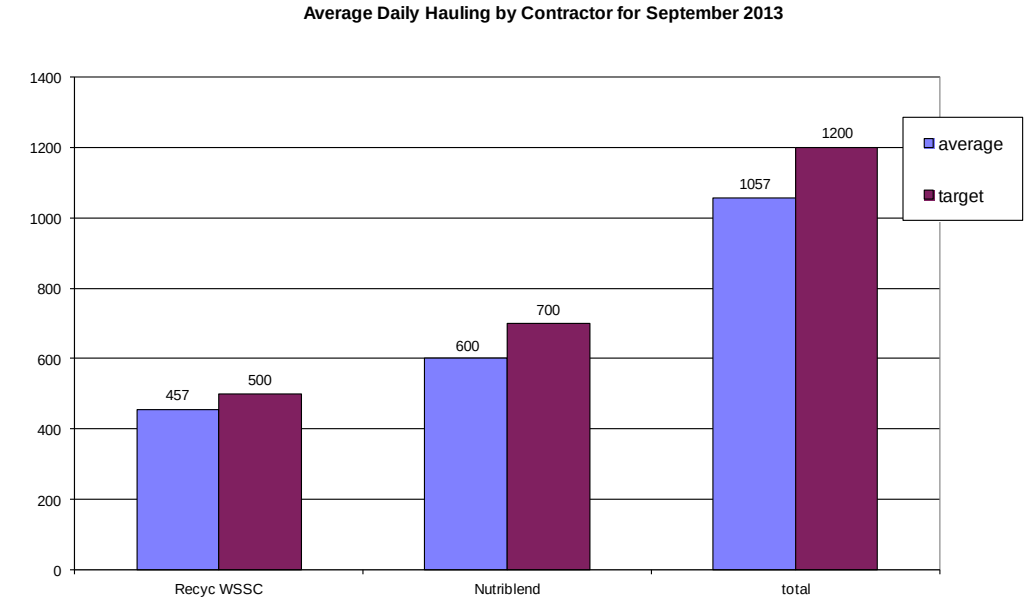
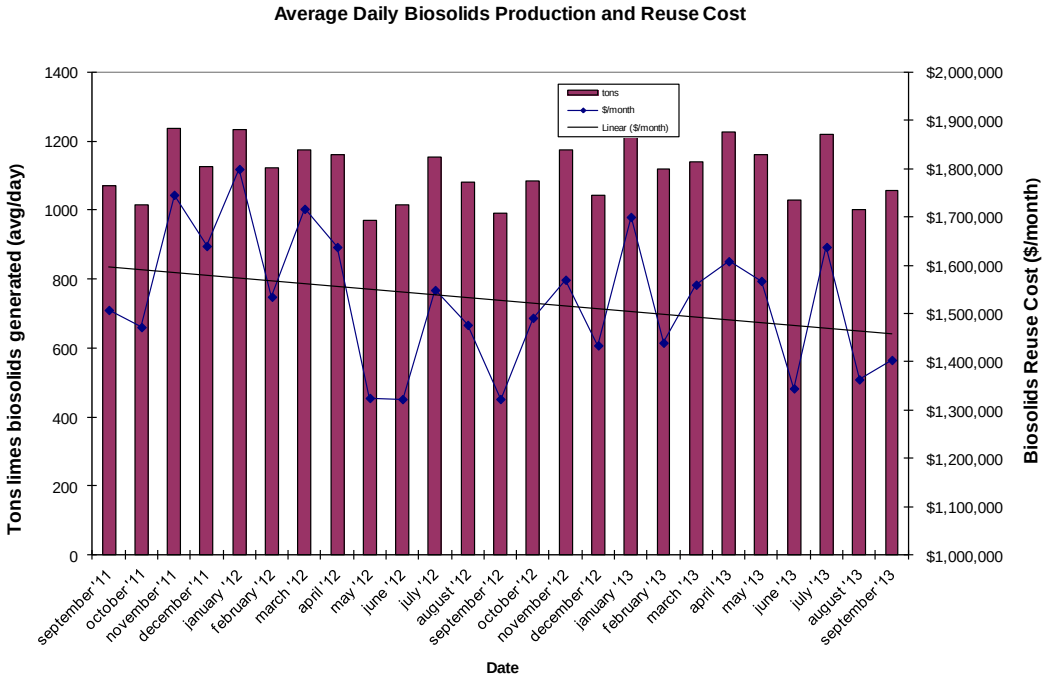
The mission of the DC Water biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective reuse of the biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and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

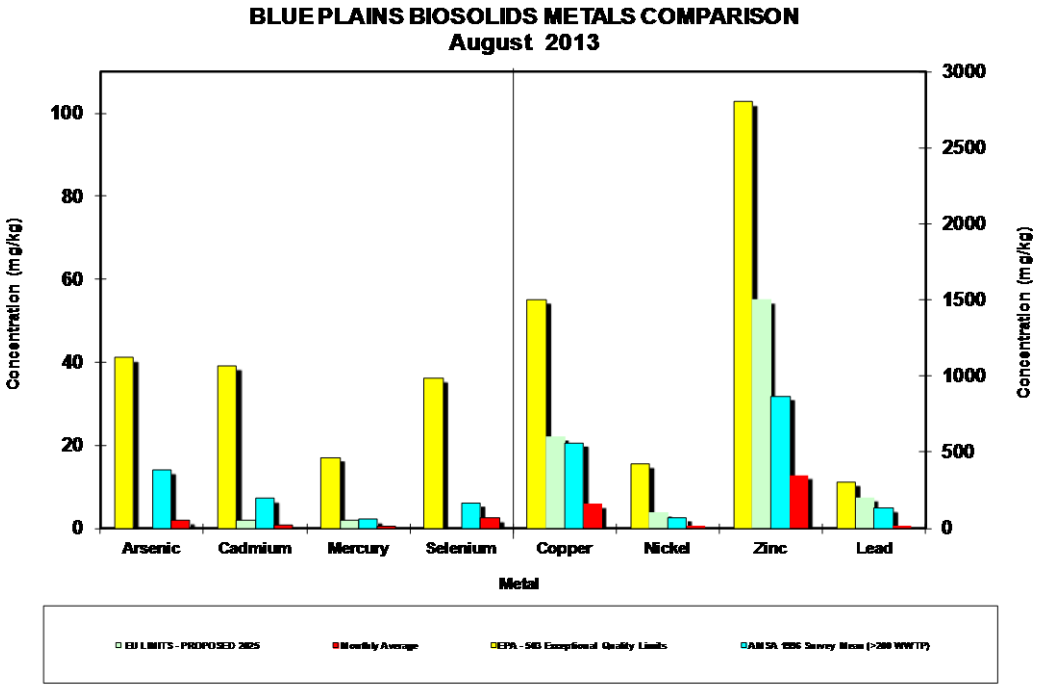
September 2013 Biosolids Division Report

In September, biosolids hauling averaged 1057 wet tons per day. The graph below shows the hauling by contractor for the month of September. Average % solids for the unlimed cake was 27.8%. Average lime dose for the month was 20.0%. Nutriblend took 168 tons of biosolids to the Spottsylvania County compost facility. At the end of August the Cumberland County storage pad had 2700 tons (~25,000 tons capacity), and the Cedarville lagoon was emptied (~30,000 tons capacity).



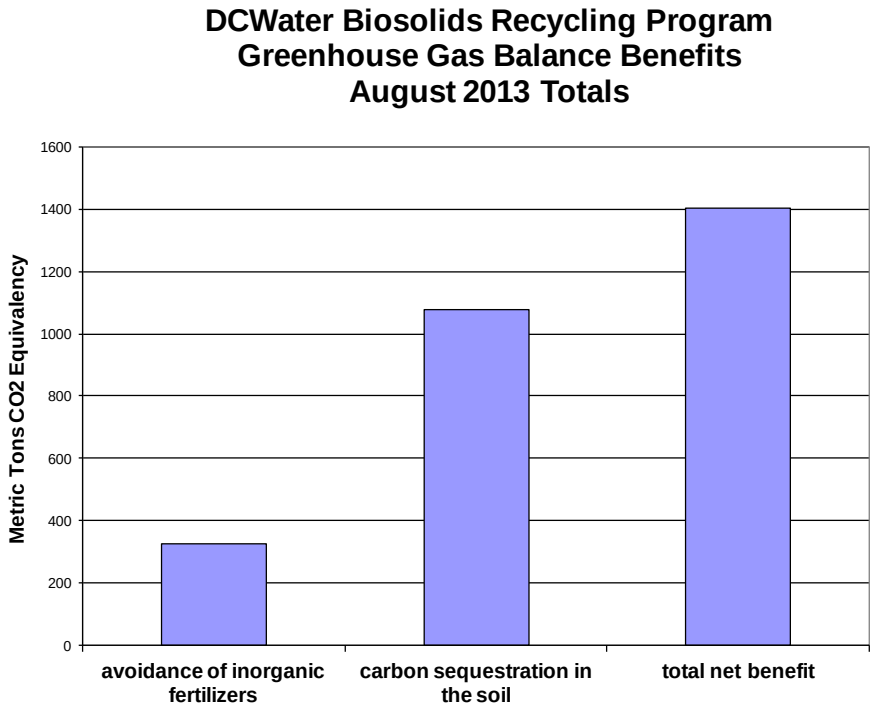


The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of August 2013. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) 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 in August coming directly from the plant and from storage facilities equaled 29,819 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 1685 metric tons CO_2 equivalent avoided emissions. This is equivalent to taking 3.431,407 car miles off the road in the month of July (assumes 20 mpg, 19.4 lb CO_2 equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 189,505 metric tons CO_2 equivalent.



September Highlights

DC Water was a sponsor for the first annual Homegrown DC—"a hyper-local farmers' market and festival" that featured food grown in D.C. by community gardens, urban agriculture non-profits, school gardens and others. Around 25 organizations, including DC Water, had a booth at the event, which attracted several hundred people. Staff from the Biosolids Program manned the booth and spoke with dozens of people about biosolids and what we are doing and plan to do with them—including the representatives of numerous local gardens, avid home gardeners, a farmer from Virginia, a production company making a video about the event, and even the author of an article on NPR entitled, "Is It Safe To Use Compost Made From Treated Human Waste?" Staff attracted visitors to the booth with a "compost sniff test", in which people were asked to smell three bags of different compost (biosolids, a yard-waste product, and a mixture of soils and composts) and try to tell the difference between them. People taking the challenge all agreed that none of the composts smelled offensive, and few were able to properly identify the biosolids compost. Staff handed out several dozen small bags of our compost to enthusiastic recipients.

Staff gave one of the keynote speeches and attended the Northwest Biosolids Management Association (NBMA) in Chelan, WA. NBMA was very interested in hearing about changes to the DC Water biosolids management program. Staff also made a similar presentation at the Virginia Water Environment Association (VWEA) Water Jam conference in Richmond. Lastly, staff gave guest lectures at UMBC in Baltimore and U of MD in College Park. Faculty at both institutions were interested in having students hear about the green energy and biosolids work underway at DC Water.

Staff gave a tour to staffers from the US Senate Energy and Natural Resources Committee. The committee staff asked for a tour of Blue Plains after hearing of efforts to generate green energy and reduce our energy use. DC Water staff conveyed this information during a roundtable discussion at the senate office buildings earlier in the summer designed to gather information on opportunities for conservation and energy production in the water and energy industries.

Map of Blue Plains Biosolids Applications and Agricultural $'s for July 2013