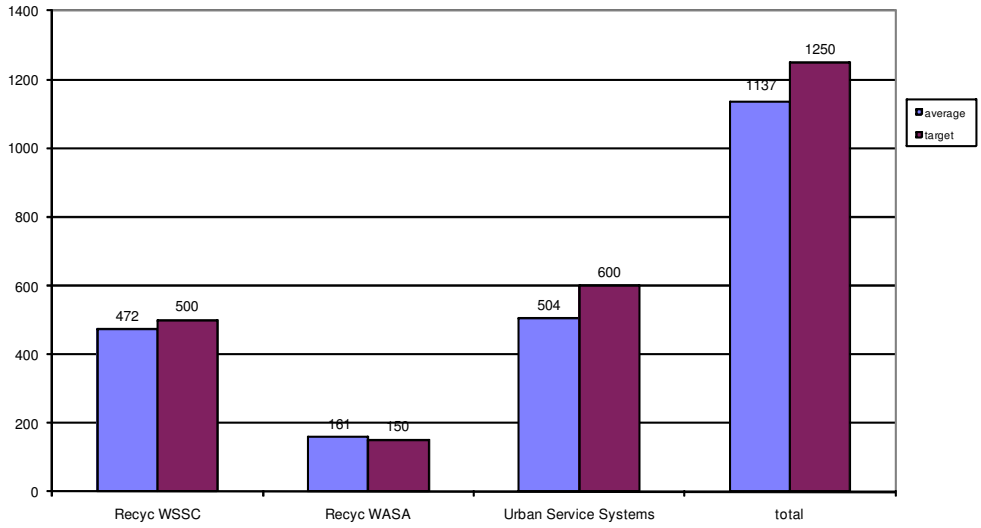
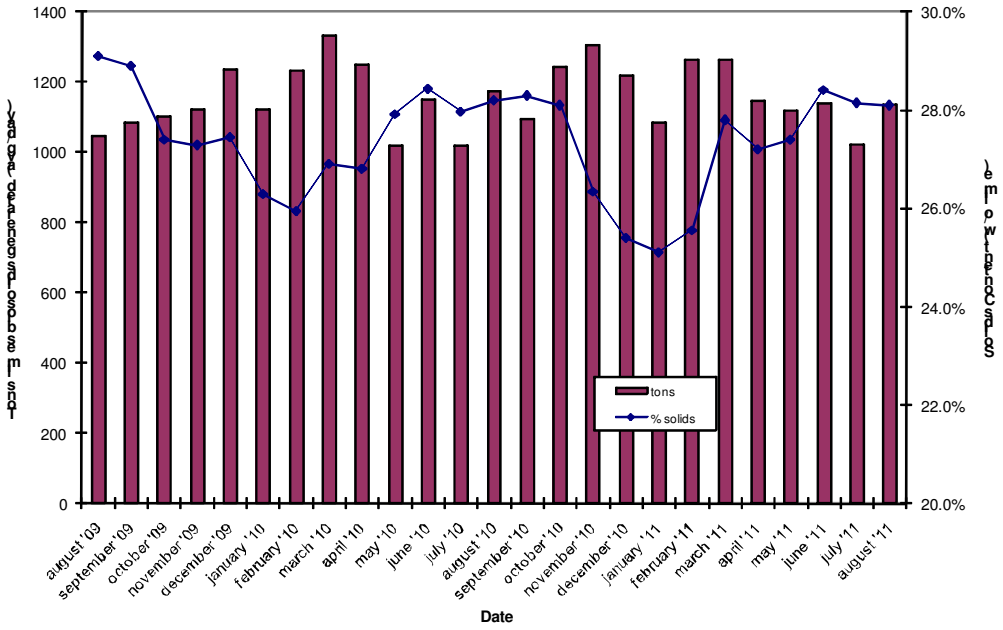
August 2011 Biosolids Division Report

In August, biosolids hauling averaged 1137 wet tons per day. The average solids content was 28.1%. The average lime dose was 15.4%. The graph below shows the hauling by contractor for the month of August. In August, DC Water 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 2449 tons went to compost production. At the end of August the Cumberland County storage pad had 480 tons (~25,000 tons capacity) and the Cedarville lagoon (~30,000 tons capacity) was empty.

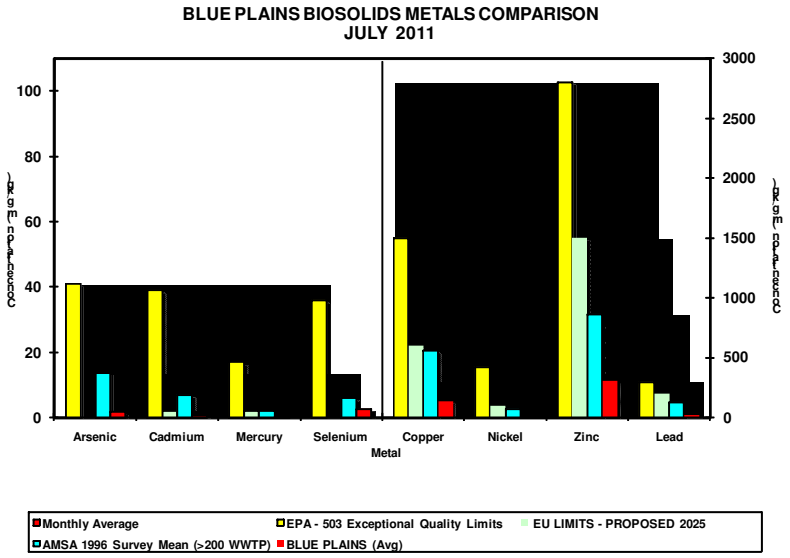
Average Daily Hauling by Contractor for August 2011



Average Daily Biosolids Production and Solids Content

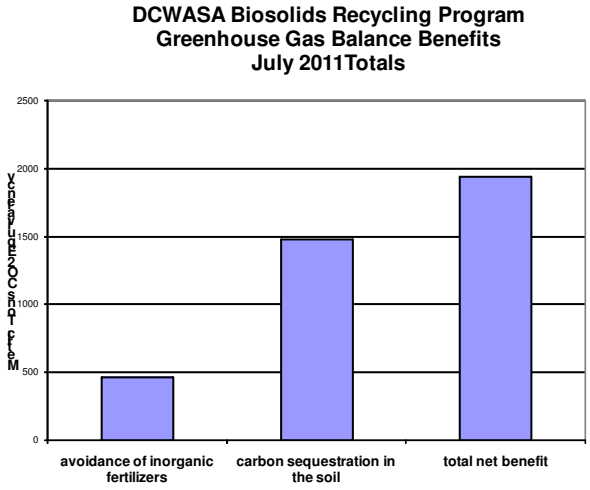


The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2011. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) 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 29,033 tons. In addition, 2718 tons went to composting. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 1941 metric tons CO_2 equivalent avoided emissions. This is equivalent to taking 7,669,397 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 January, 2007 is 84,265 metric tons CO_2 equivalent.



August Highlights

In August, staff participated in two efforts to disseminate information about the strides DC Water is making to protect the environment. On Sunday, August 21st, staff filmed 4 15 minute segments for a local cable access show (shown live on the internet worldwide), Emerald Planet. The host of Emerald Planet is Dr. Sam Hancock, who runs a non-profit organization of the same name with the following vision:

- Providing tools and an Internet platform for linking sustainable development experts, practitioners, and citizens around the planet to share development ideas, processes, and technologies providing ever better quality-of-life conditions for all people
- Encouraging all citizens to contribute their unique knowledge, understanding, resources, energy, and contacts to reduce, and possibly reverse, the negative effects of global climate change.

Staff spoke about nutrient removal at Blue Plains, digestion for energy production and greenhouse gas reduction, and the Clean Rivers Project. The show is available on the web at http://emerald-planet.org/08212011.aspx.

The second dissemination effort occurred with a film crew from Green Education 101, a show that airs on WHUT in DC, highlighting energy and environment education. Green Education 101 focuses on good stewardship practices, environmental issues, alternative energy choices & resources and getting youth involved. The producer is doing a show on DC Water environmental initiatives, and on this day visited a farm site to film biosolids recycling activities. The show is expected to air in the fall.

Staff made a presentation on the digestion project at the Mid Atlantic biosolids Association (MABA) annual technology seminar in Dover, DE on August 10th. The presentation focused on the environmental and fiscal benefits of the project, which broke ground in the spring and is scheduled for completion in early 2015.

Staff held several meetings to advance the concept of the use of biosolids compost in urban areas. Staff is promoting the use of the product for LID projects and for green roofs through demonstration projects. These demonstrations will help establish the product value for when we are producing Class A digested biosolids for sale as a blended soil amendment.

Map of Blue Plains Biosolids Applications and Agricultural $'s for July 2011