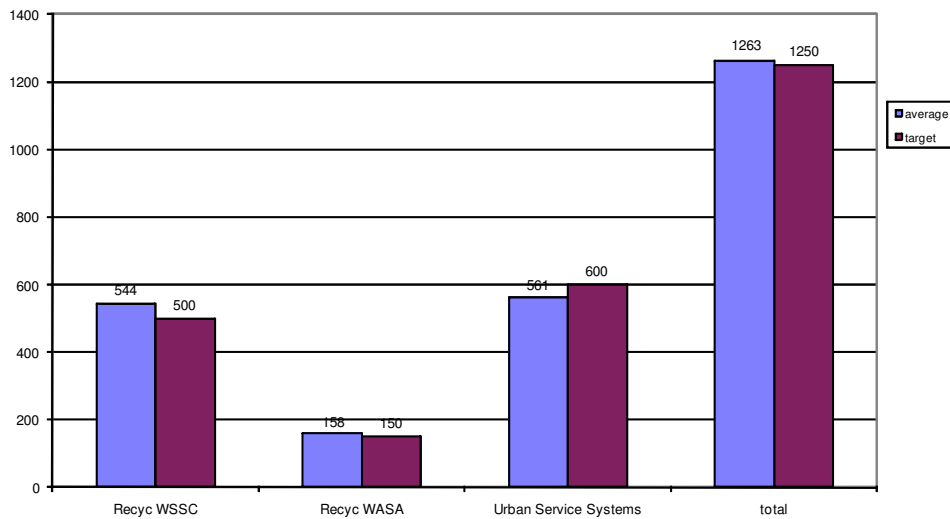


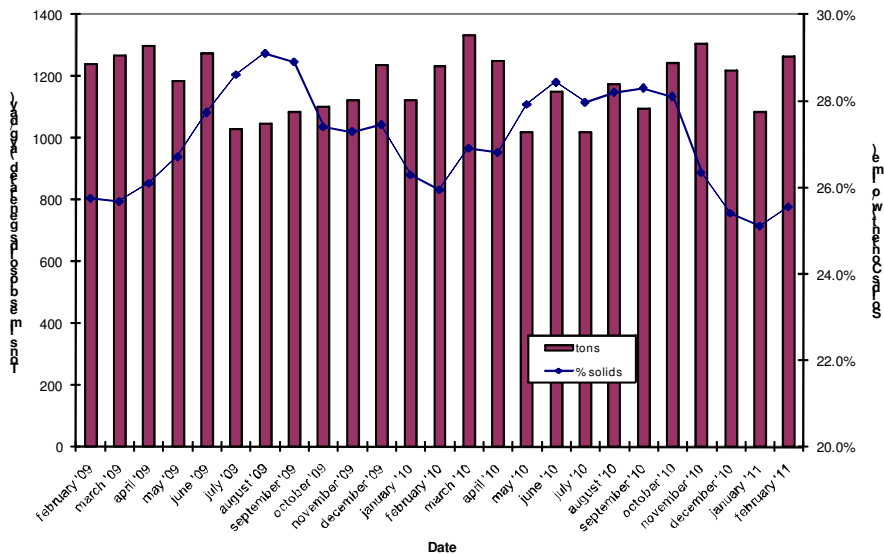
## February 2011 Biosolids Division Report

In February, biosolids hauling averaged 1263 wet tons per day. The graph below shows the hauling by contractor for the month of February. The second graph shows average tons recycled and solids content for the last 24 months. The average solids percentage for February was 25.6%, and average lime dose was 13%. In February, DC Water again shipped biosolids to the McGill Compost Facility in Waverly, VA. This is done through the Urban Service Systems contract. In February a total of 265 tons went to compost production. At the end of February, the Cumberland County storage pad had 5048 tons (~25,000 tons capacity) and the Cedarville lagoon had 12,900 tons (~30,000 tons capacity).

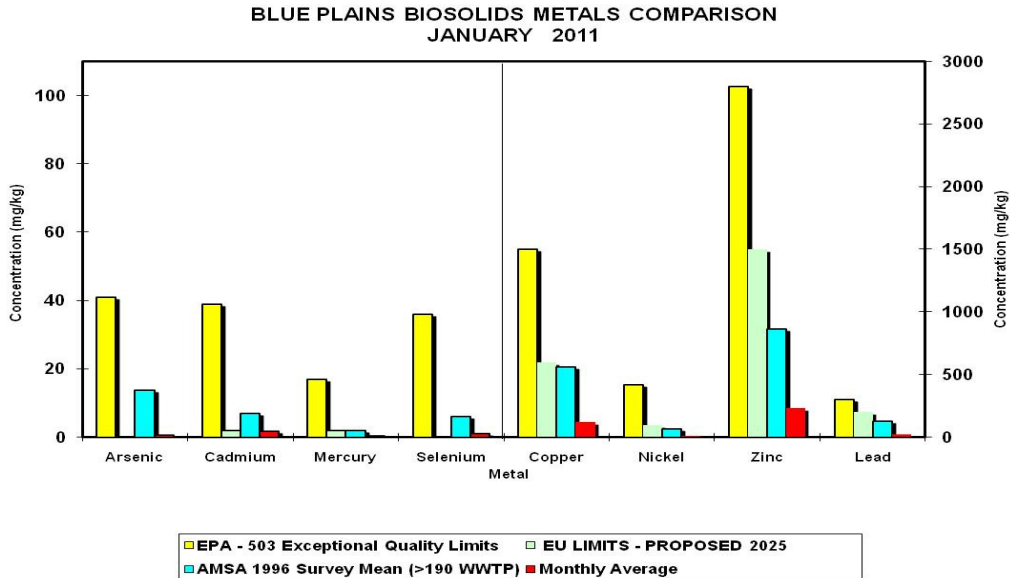
Average Daily Hauling by Contractor for February, 2011



Average Daily Biosolids Production and Solids Content



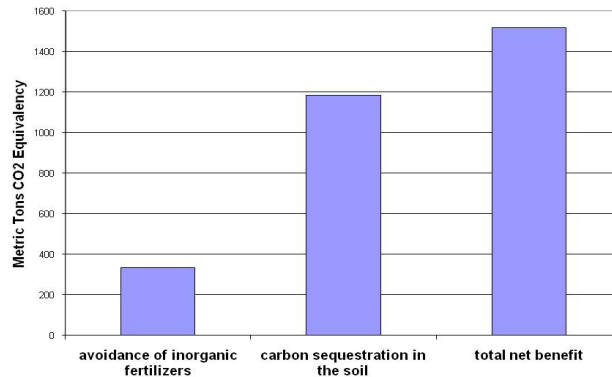
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of January 2011. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the AMSA average levels surveyed in 1996, and the European Union (EU) 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

Zero tons of biosolids went to landfills in January (this data one month behind). The quantity land applied coming directly from the plant and from storage facilities equaled 28,304 tons. Of this, 161 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 1516 metric tons CO<sub>2</sub> equivalent avoided emissions. This is equivalent to taking 4,163,707 car miles off the road in the month of January (assumes 20 mpg, 19.4 lb CO<sub>2</sub> equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since February, 2007 is 71,730 metric tons CO<sub>2</sub> equivalent.

**DCWASA Biosolids Recycling Program  
Greenhouse Gas Balance Benefits  
January 2011 Totals**



## February Highlights

DC Water contributed Class A finished biosolids compost to the DC DOT for use in a restoration project near the intersection of Florida Avenue and North Capitol in the District (see photos below). The material is used to condition the soil to improve success and survival rate for trees and ground cover, both of which help reduce runoff to the combined sewer system. This is the first of several planned restoration projects in which DC Water will contribute compost. In addition, staff plans to contribute compost for the street tree planting program. The use of biosolids compost will help trees survive. For every tree planted we will see the benefit of reduced runoff at Blue Plains. The use of this resource in the District will demonstrate its benefits, help keep the Bay clean, reduce costs, and reduce our carbon footprint (carbon sequestration and reduced truck miles).



Staff participated in a regional biosolids-to-energy workshop as part of a joint project funded by DC Water and several northern VA utilities. The workshop discussed the findings of the draft report. The participants tasked the project manager with evaluating emerging technologies for energy recovery from biosolids. Initial technology screening found two that are in development and have installations or planned installations, including a gasifier (for electricity generation) and a technology to derive hydrogen fuel (for multiple uses). Cost estimates are preliminary at best, and not based on actual operating facilities of our size. DC Water committed to the project knowing that we will have digested material in a few years. We have stated that we would participate in such a project if it was suitable for taking a digested product (or our limed product during

peaks) and was cost competitive with our other options. During this meeting we opened the discussion of importing sludges to the CAMBI process at Blue Plains, which will have the capacity to do so in all cases but peak flow. In order to take peak flows, the digester project would require expansion to Phase II – an additional CAMBI train and two more digesters. This regional approach and potential revenue stream could favorably change the economics for the Phase II digester project.

### Map of Blue Plains Biosolids Applications and Agricultural \$'s for January 2011

