

May, 2015

Biosolids Resource Recovery Monthly Report



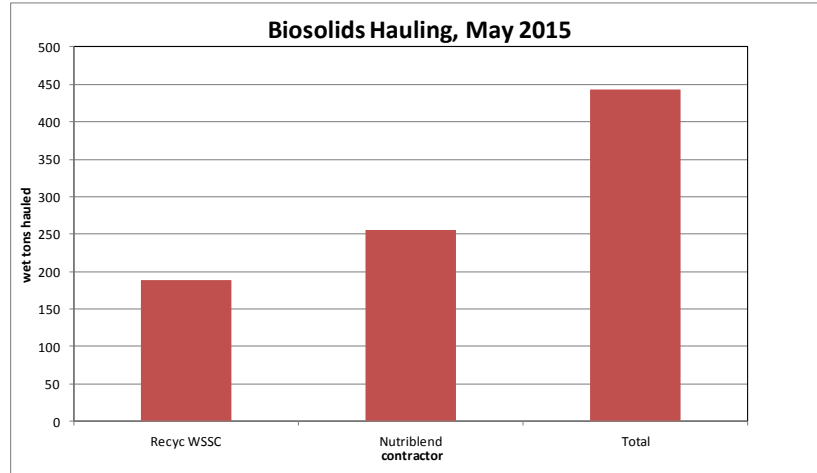
DC Water

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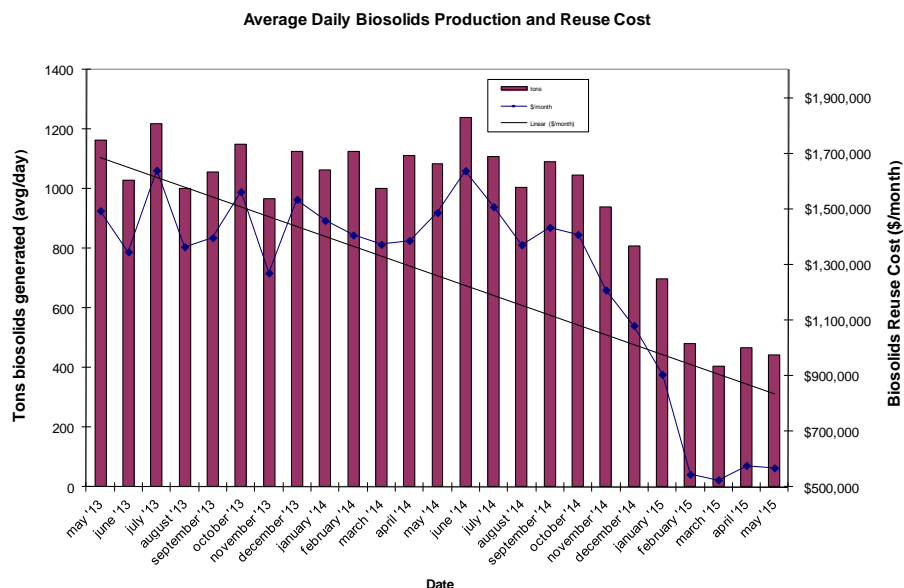
The mission of the DC Water biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective reuse of the biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and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

May 2015 Resource Recovery Report

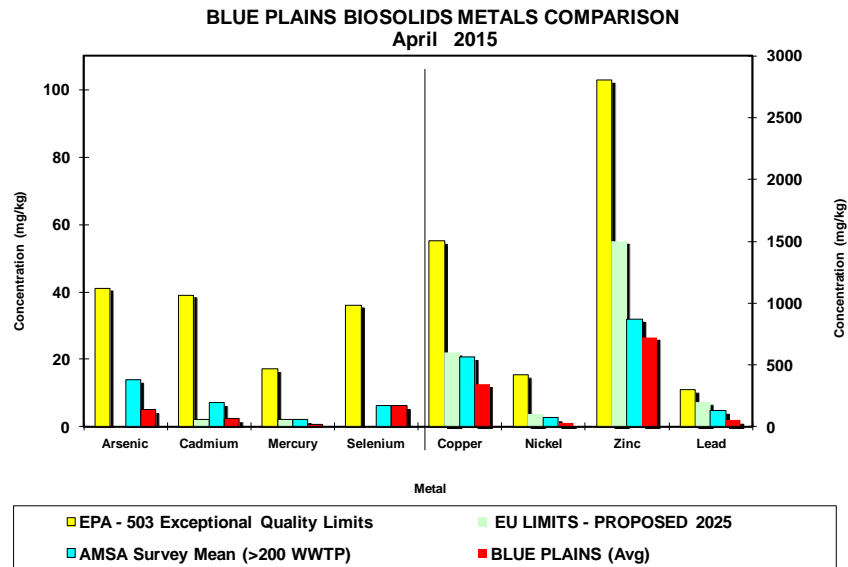
In May, biosolids hauling averaged 444 wet tons per day (wtpd). Of this total, 12 wtpd were lime stabilized Class B, and 432 wtpd were digested. The graph below shows the total hauling by contractor for the month of May. The average percent solids for the digested material was 31.8%. At the end of May the Cumberland County storage pad had approximately 2000 tons (~25,000 tons capacity), Cedarville lagoon had approximately 2026 tons of Blue Plains biosolids (~30,000 tons capacity), and Fauquier lagoon had 2355 tons (~15,000 tons capacity).



Please note the drop in biosolids management costs (second graph below, right vertical axis) due to the reduction in solids production since digesters came on line, and also due to the drop in fuel costs. In May, diesel prices averaged \$3.15/gallon and with the contractual fuel surcharge the weighted average biosolids reuse cost in May for the two contracts (DC Water and WSSC) was \$41.34/wet ton. For comparison, in May 2014 the average diesel price was \$4.15/gal and the average contract cost was \$44.07/wet ton.



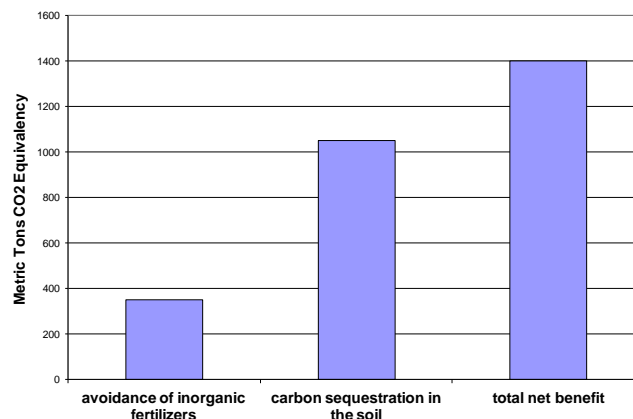
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of April 2015. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) 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

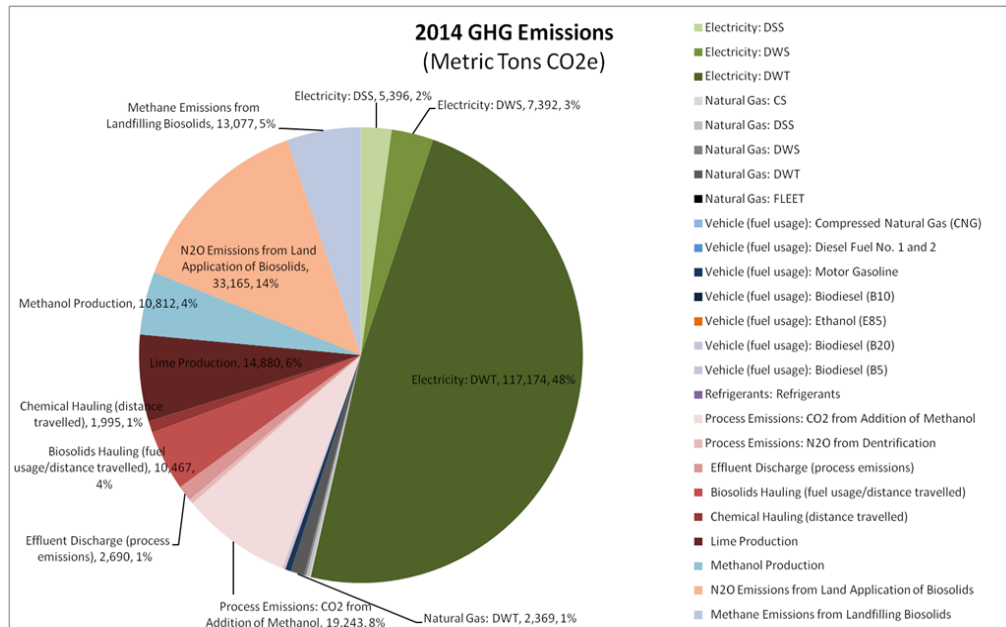
The quantity land applied in April coming directly from the plant and from storage facilities equaled 13,748 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 1402 metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 2,856,413 car miles off the road in the month of April (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 141,335 metric tons CO₂ equivalent.

DCWater Biosolids Recycling Program Greenhouse Gas Balance Benefits April 2015 Totals

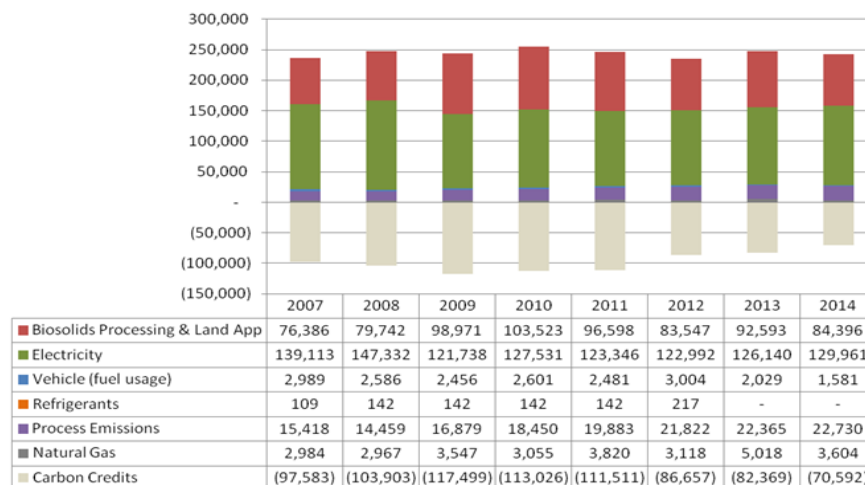


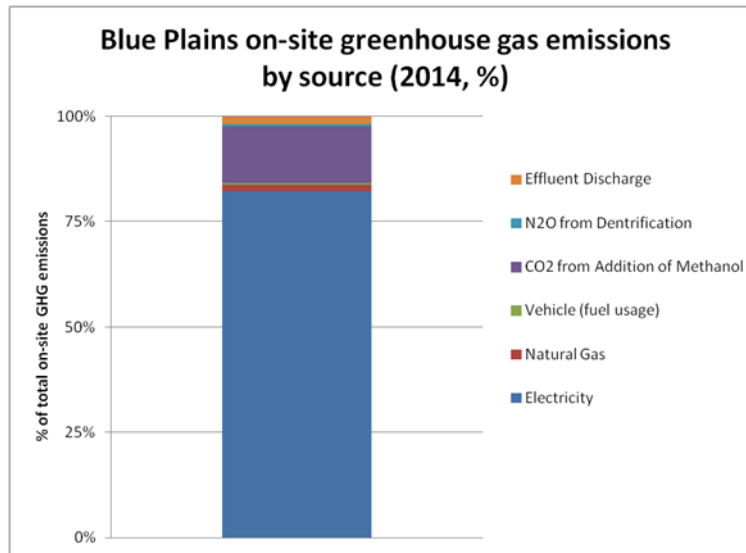
May Highlights

Staff completed the graphs for last calendar year's DC Water carbon footprint. Below are three graphs showing the pie graph segmenting the sources of DC Water's carbon footprint, with the largest portion coming from the electricity DC Water uses. The second graph compares the carbon footprint for each year from 2007 – 2014. And the third graph shows the breakdown of the carbon footprint for the Department of Wastewater Treatment (Blue Plains), the biggest user of electricity within DC Water.



DC Water Annual GHG Emissions Estimates (Metric Tons CO₂e)





Map of Blue Plains Biosolids Applications and Agricultural \$'s for April 2015

