November 2015 Resource Recovery Report

In November, biosolids hauling averaged 410 wet tons per day (wtpd). The graph below shows the total hauling by contractor for the month of November. The average percent solids for the digested material was 30.6%. At the end of November the Cumberland County storage pad had approximately 11,561 tons (~25,000 tons capacity), Cedarville lagoon had approximately 0 tons of Blue Plains biosolids (~30,000 tons capacity), Goochland pad had 1000 tons, and Fauquier lagoon had 1126 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 November, diesel prices averaged \$2.60/gallon and with the contractual fuel surcharge the weighted average biosolids reuse cost in November for the two contracts (DC Water and WSSC) was \$40.10/wet ton. For comparison, in November 2014 the average diesel price was \$3.62/gal and the average contract cost was \$42.88/wet ton.

The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of October 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.



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

Environmental Benefits

The quantity land applied in October coming directly from the plant and from storage facilities equaled 12,195 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 812 metric tons CO_2 equivalent avoided emissions. This is equivalent to taking 1,654,292 car miles off the road in the month of October (assumes 20 mpg, 19.4 lb CO_2 equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 141,858 metric tons CO_2 equivalent.



Highlights

Staff gave a presentation and tour to around a dozen journalists, editors and other members of the <u>D.C. Science Writers Association</u>, an organization with 500+ members founded in 1987. The tour focused on innovative DC Water projects and initiatives,

including biosolids marketing, the new digesters, Clean Rivers' green infrastructure efforts and co-digestion. The participants had plans for various articles based on the tour. One blog has already been published:

http://www.lastwordonnothing.com/2015/11/17/taking-the-waste-out-of-wastewater/



DC Water Carbon Footprint