December, 2007

Biosolids Division Monthly Report

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District of Columbia Water and Sewer Authority

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The mission of the District of Columbia Water and Sewer Authority biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective management of biosolids produced by the Blue Plains Advanced Wastewater Treatment Plant while helping preserve agriculture and protect the Chesapeake Bay.

December 2007 Blue Plains Biosolids Report

In December, biosolids hauling averaged 1127 wet tons per day. The graph below shows the hauling by contractor for the month of December. Average % solids was 25.98%, and average lime dose was 13.7%. A second graph shows average tons recycled per day for the last 24 months.



Average Daily Hauling by Contractor for December, 2007



month



The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of November 2007. 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 even the proposed 2025 European Union (EU) limits.



Environmental Benefits

In November of 2007 staff sent 24,788 wet tons of biosolids for reuse. 2,541 tons of material came out of storage in November. 258 tons of material went to landfills in November. The graph below shows the benefits as compared to landfilling all the biosolids in a non-energy recovering landfill. Taking into account the fuel required to transport biosolids to the field, the net benefit is 2615 metric tons CO_2 equivalent avoided emissions. The graph shows the benefit (carbon credit) of the sequestration, the energy savings due to avoiding conventional fertilizer use, and the total of the two. This is equivalent to taking 5,930,014 car miles off the road in the month of November (assumes 20 mpg, 19.4 lb CO2 emissions/gallon gas – EPA estimate).

DCWASA Biosolids Recycling Program Greenhouse Gas Balance Benefits November 2007 Hauling Totals



HIGHLIGHTS

Staff met in Richmond with the environmental sub group of the VA Department of Environmental Quality Expert Panel. The group met to discuss progress on the interim report and to further develop the agenda for the following years work. The interim report is currently being drafted by DEQ staff.

Staff met with VA Tech researchers in order to develop a list of priorities for research in the next year. Priorities include continuation of the essential plant growth substance research, trenching study on gravel mines and with poplar plantation, work on greenhouse gas and carbon sequestration, and phosphorus studies. Additional priorities are being examined and will be reported upon in a future report.

Staff, along with other members of the Virginia Biosolids Council, met with scientific representatives of the Chesapeake Bay Foundation (CBF) to discuss biosolids land application and alternative uses. CBF showed great interest in the biosolids program and the DCWASA research program. CBF is very interested in the potential to recover energy from organic products, and staff explained the process by which we are deciding upon a digester and gas utilization technology. The meeting was designed as a means to start a dialogue, and all parties agreed to continue the discussion and to meet again in the near future.

Map of Blue Plains Biosolids Applications and Agricultural \$'s for November 2007

