April, 2017

Biosolids Resource Recovery Monthly Report

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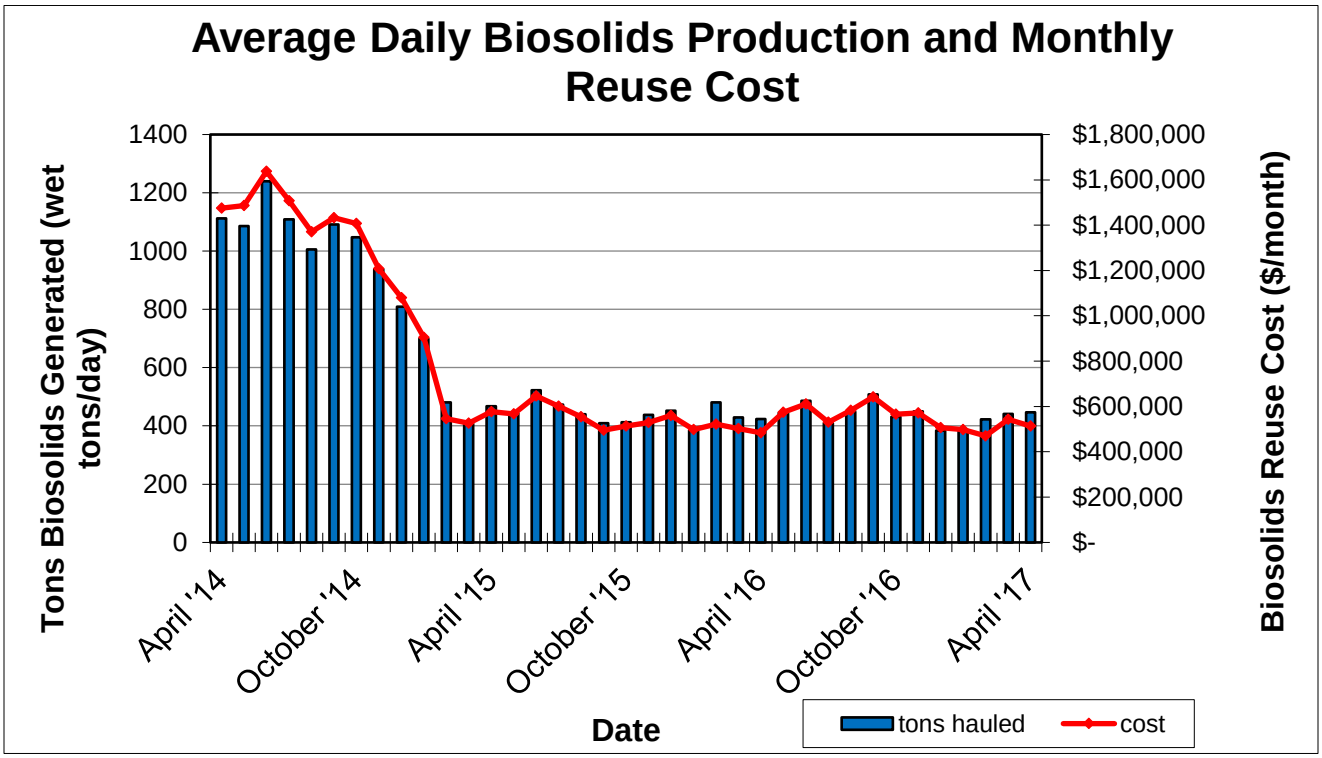
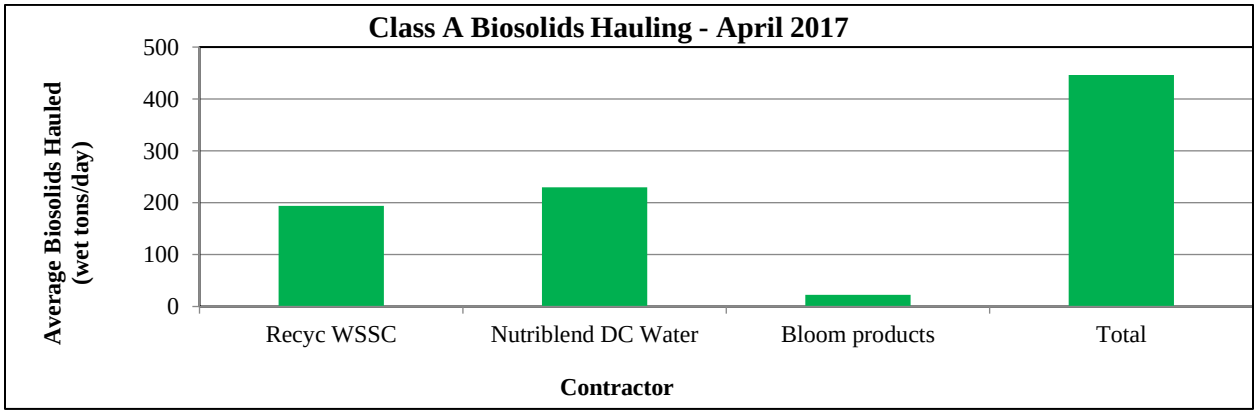
The mission of the DC Water Resource Recovery Program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publically acceptable and cost-effective reuse of the Biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and protect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

RESOURCE RECOVERY – April 2017

In March, biosolids hauling averaged 446 wet tons per day (wtpd). The average percent solids for the Class A material was 30.3%. The graph below shows average daily biosolids produced and the associated monthly cost for reuse (transportation and application cost) for a three-year period ending April 2017. In April, diesel prices averaged $2.77/gallon, and with the contractual fuel surcharge, the weighted average biosolids reuse cost (taking into account the marketed material) was $38.80 per wet ton.



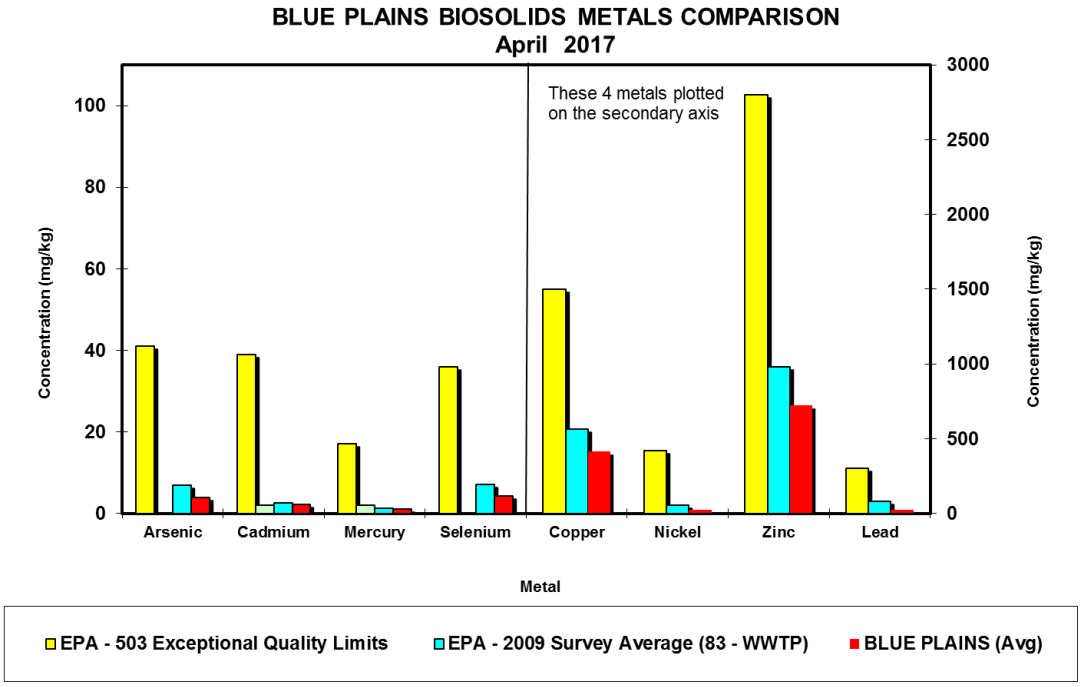
The average quanities of Class A biosolids transported and applied on farms by the two major contracts (WSSC's Recyc and DC Water's Nutriblend) and the quantites marketed as Bloom are shown on the graph bleow. In April, 676 wet tons of Bloom were distributed to 9 different customers.



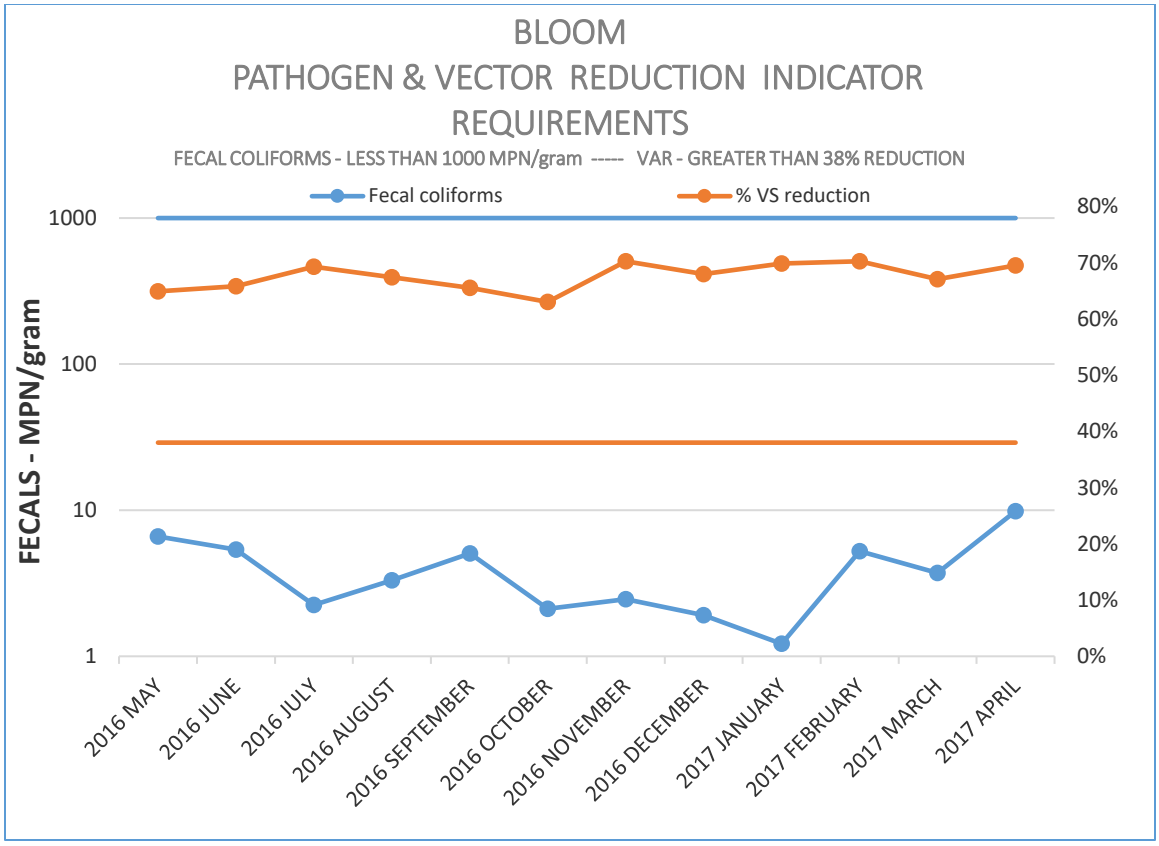
Product Quality

All biosolids produced during the month of March met Class A Exceptional Quality (EQ) requirements required by EPA.

The graph below shows the EPA regulated heavy metals average concentrations in the Class A biosolids. The concentrations are considerably below the regulated exceptional quality limits (EPA-503 Exceptional Quality Limits) and the national average (EPA-2009 Survey Average).

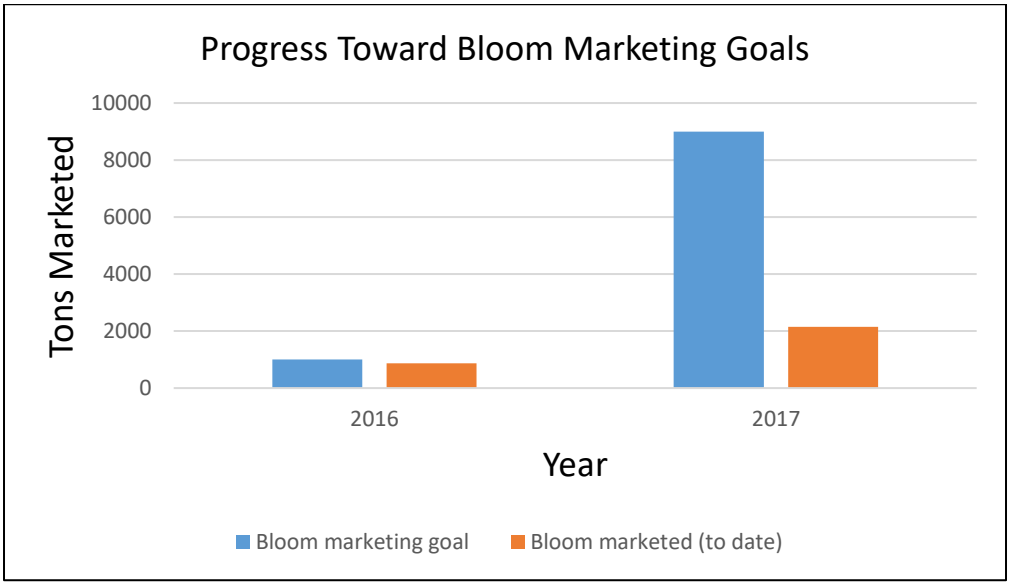


The graph below shows both Vector Attraction Reduction (VAR) and Fecal Coliform (FC) results in the Class A product, both of which are required to maintain the Class A Exceptional Quality (EQ) status. Vector Attrraction Reduction is measured by the reduction in Volatile Solids (VS) or organic compounds that may be odorous and attract nuisance vectors such as flies and rodent. DC Water anaerobic digesters reduced VS by over 65 percent, well above the required 38 percent minimum. In addition, the graph shows fecal coliforms levels in the Class A product. Fecal coliforms are indicators of disease causing organisim (pathogens), and must be below 1,000 MPN/g to meet Class A standards. The FC levels in the Class A product are two or three orders of magnitude less than the maximum allowable level.



Bloom Marketing

Bloom sales eclipsed the 2000 ton total for the year, with sales to a new large nursery and garden center in MD. This partner is interested in serving as a distributor for Bloom, selling it under the Bloom name and helping to promote its use.



Distribution and Marketing Permit Update

Currently, the Bloom program possesses permits to distribute and market Bloom in Washington DC, Maryland, and Pennsylvania. Staff is working with Maryland Department of Environment (MDE) to obtain a letter of authorization for potential soil blenders, a requirement for their use of biosolids products. The requirement is simply for "written authorization" from MDE, but it is unclear what is required to obtain "written authorization". Staff is meeting with MDE to determine this and develop a template for soil blenders. The application for the Virginal distribution and marketing permit is submitted and under review by the Virginia Department of Environmental Quality. Receipt of the final draft permit is expected by summer of this year.

March 2017 Bloom Reuse Map