

# BIOSOLIDS NEWS

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## New Kent Supervisor promotes farm stewardship

Farmers, it's been said, are the best stewards of the land. W. R. 'Ray' Davis, a long-time farmer who calls New Kent County home, uses modern conservation practices to ensure the rivers and streams near his farmland are not impacted by his operations.

Actively farming for more than 35 years Davis grows corn, wheat and soy beans on 2,600 acres of farmland spread over four counties – New Kent, King William, King and Queen and James City counties. While it is an all-consuming operation, Davis also maintains a heart and passion for his native county and currently serves on New Kent's Board of Supervisors.

New Kent is one of 73 counties in Virginia that permits the agricultural application of biosolids, either through a Virginia Pollution Abatement (VPA) or Virginia Pollutant Discharge Elimination System (VPDES) permit. Biosolids are a nutrient rich organic byproduct of the



*Many central Virginia farmers use biosolids as a soil amendment for row crops.*

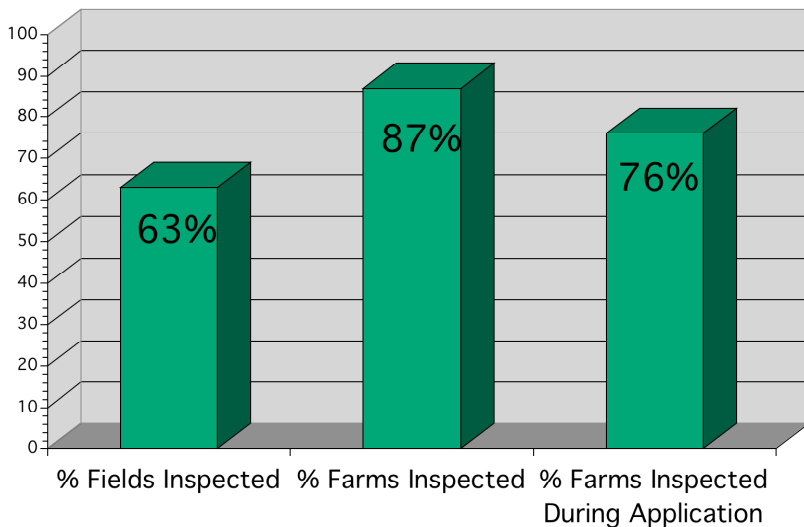
wastewater cleaning process. When wastewater arrives at a treatment plant, it goes through extensive physical, chemical and biological processes that clean the wastewater and remove solids. The cleaned water is returned to local receiving waters. The remaining solids are further treated and processed into biosolids. Biosolids are then used to fertilize farms and, in some cases, used as an ingredient in compost.

Biosolids have been recycled on family farms in New Kent for decades-since the material was recognized as a valuable nutrient management tool for farmers in Central Virginia several decades ago. Davis has used biosolids previously and has found them beneficial. "I have used biosolids on some of my farms and they performed as advertised. I

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*The Virginia Biosolids Council supports the recycling of biosolids in Virginia through information and education on the beneficial use and safety of biosolids. The Council is supported by municipal wastewater treatment plants, land application and composting companies and biosolids users, and is available as a resource to those who need information about the recycling of biosolids.*



*This chart shows the number DEQ inspections through 9 months of 2010. 76% of all farms and 63% of fields were inspected by the DEQ biosolids program.*

## New Kent Supervisor and Farmer

...Continued from front page know plenty of farmers who have enhanced crop productivity through their use," he said.

Davis practices intensive conservation practices where he can and believes that biosolids can provide important soil amendments to those farmers who choose to use the material. "I do believe that the beneficial use of biosolids – both Class A and Class B – should be allowed by farmers who choose to use this material," he said, "but I also believe that the generators should be constantly researching and looking for ways to produce a material that allows its use to be sustainable for farmers in the Chesapeake Bay watershed."

During a recent conversation at the Virginia Association of Counties meeting he

acknowledged the benefit of migrating some of those practices to the application of biosolids. "I know that biosolids improves soil quality," he said, "and am glad to see that farmers now have the option of applying biosolids in a manner that minimizes soil compaction."

Agriculture is the primary provider of working landscapes and open space in Virginia. It is also Virginia's largest economic contributor. As both an elected official and a farmer, Davis believes that sustainable farming is among the best ways to ensure the preservation of open space. "Promoting stewardship within the farm community is essential," he said. The use of biosolids by farmers who choose to amend their soils with this product does not conflict with that objective, Davis said.

## VBC Member Gets Technology Patent

The U.S. Patent and Trademark Office has awarded the District of Columbia Water and Sewer Authority (DC Water) a patent for a unique wastewater treatment process. DC Water is a member of the Virginia Biosolids Council. The treatment process achieves three specific benefits:

- It produces a low odor compost-like biosolids product
- It degrades microconstituents within biosolids
- It removes nitrogen from recycle streams

The innovation is a new aerobic digestion process that follows anaerobic digestion. "Our research is aimed not only at current regulations, but also emerging issues such as endocrine disruptors (estrogens), personal care products (PCPs) and flame retardants (PBDEs), along with process improvements," said General Manager George S. Hawkins.

The invention is titled, "Method for Treating Raw Sludge Including Simultaneous or Pulsed Aerobic/Anoxic Digestion" and is assigned to DC Water. Walter Bailey, Christopher Peot, PE, and Sudhir Murthy, PhD, PE, Research and Laboratory Manager, are named as inventors. The research was conducted with Virginia Tech.

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