


Mallek seeks increased scrutiny of biosolids; Recyc seeks to apply treated sewage on more acreage  
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The chair of the Albemarle Board of Supervisors will ask her colleagues in July if they will support an effort to increase scrutiny of the use of treated human waste as fertilizer in Virginia.

“Citizens have little substantive information about the contents and or safety of those contents, thus the uproar every time a permit is activated,” said Supervisor Ann H. Mallek in an email to Charlottesville Tomorrow.

Mallek’s request comes at a time when the Virginia Department of Environmental Quality is considering whether to allow Culpeper-based Recyc Systems to extend the practice of spreading biosolids to more county land.

Susan Trumbo, Recyc’s technical manager, said she and many others have worked in direct contact with biosolids for years without ill effects.

“It’s a very emotional topic, but if you look at the facts, the doctors and medical experts repeatedly say there’s been no health issues in regards to properly applied biosolids,” Trumbo said in an interview.

The DEQ currently allows Recyc Systems to apply biosolids on 6,438 acres of county farmland, and the company has requested permission to add an additional 545.1 acres in the county. A decision will be made by the DEQ later this year.

The DEQ is also reviewing several changes to its regulations on biosolids, but these generally concern notification procedures and not whether more research is warranted into their safety.

Mallek has been reviewing the proposed changes, but feels they do not go far enough to address potential health concerns.



“The DEQ maintains that they are watching the research to make sure they are current, but that is a long way from a complete list of components or their individual toxicity, or the way they may interact [with the environment],” Mallek said.

Trumbo said she understood the purpose of the new regulations, even if she does not think they are based in science.

“The new regulations are going to add another layer of rules, whether or not there’s a need for them, in order to respond to the emotions of the public,” Trumbo said. “I don’t know if they’ll protect the environment any more than we do today.”

Biosolids in Albemarle County generally come from Washington’s Blue Plains Wastewater Treatment

Plant. The waste is treated by a series of processes to reduce pathogens, including using lime to raise the pH levels of the soil to destroy the cell membranes of any microbes.

Greg Evanylo, a professor of soil environmental quality at Virginia Tech, said he believes the practice is reasonably safe, but he does have his doubts.

"You have to assess risk versus reward, and there are plenty of situations in everyday life that we take for granted," Evanylo said. "Nothing is 100 percent risk-free but I am comfortable that the regulations are protective."

Evanylo said lime stabilization will not eliminate all of the pathogens that may be present in biosolids, but that their proper application greatly reduces the risk.

"I think it's much more difficult to get ill from these microbes than some people might want to believe," Evanylo said.

However, Jordan Peccia, a professor of chemical and environmental engineering at Yale University, recently co-authored a paper that suggested current practices may not be enough to protect against norovirus, which can cause diarrhea.



*Under the new regulations, companies permitted to spread biosolids will be compelled to provide more information on required signage*

Peccia said when the Environmental Protection Agency studied biosolids before issuing standards in 1992, its scientists based their assessments on two potential pathogens — salmonella and enterovirus.

"We went back and did a risk analysis and added all these pathogens," Peccia said. "We found that the risk for salmonella and enterovirus were really quite low. But when we included new pathogens such as norovirus and adenovirus we found that the risk was significantly higher."

Peccia said his research illustrates why more study is necessary, but that doesn't mean he advocates banning the practice.

"The next step is that we really need to have a better idea of what the pathogens are before we can say anything about the risk," Peccia said.

Evanylo said he believes an area that requires further study is that of emerging organic compounds, such as flame-retardants and detergents. However he said data collected to date have not indicated anything alarming to him.

Neil Williamson, president of the Free Enterprise Forum , which analyzes government policy on behalf of the local business community, said his organization has studied the issue and believes that current regulations are sufficient to monitor the practice.

"We generally believe that biosolids regulations as they exist today are rather stringent and protect the health, safety and welfare of citizens," Williamson said in an interview.

He said they have been safely applied for twenty years and that the DEQ requires the biosolids to be tilled into the ground within 24 hours of application, as well as keeping cattle from grazing the lands for 30 days.

“Those [regulations] are designed to mitigate perceived concerns, not scientific concerns,” Williamson said. He added there is no public notification process required for the practice of using poultry waste as fertilizer.

Mallek has requested the Board of Supervisors discuss the matter at their meeting on July 6.