

Minutes of the Chatham County Environmental Review Advisory Committee (ERAC) Meeting, October 8, 2015

Attendance

Committee members:

Present: Ray Bode, Jerry Cole, Fran DiGiano, Luke Groff, Mary Beth Koza, Terry Schmidt, Sherri Stuewer, and Graham Swift

Absent: Elaine Chiosso, Dave Mattison, and Vic D'Amato

Guests: Diana Hales, Chatham County Board of Commissioners Liaison to ERAC

Staff: Dan LaMontagne, Chatham County Director of Environmental Quality

Call to order

6:30 PM by Chairman Jerry Cole for meeting to begin following the published Agenda

Introductions of all in attendance

Recording Secretary

- Fran DiGiano was designated by chairman, Jerry Cole, as recording secretary for the meeting

Approval of minutes of the September 10, 2015 meeting

- Graham Swift moved to accept the minutes and Terry Schmidt seconded the motion. All members of committee voted to approve the motion.

Public Input

- No public in attendance

Discussion of Proposed Coal Ash Leachate Treatment at Sanford WWTP

- Sherri Stuewer led discussion that started at the September 10, 2015 ERAC meeting with her presentation of a nationwide study on "Characterization of Field Leachate at Coal Combustion Product Sites, Nov 2006 by DOE-EPRI". At the last meeting, the question was raised about which metals would be monitored at the Sanford Waste Water Treatment Plant (WWTP).
- Related to monitoring of metals, members of ERAC had raised concerns at the September 15, 2015 meeting about the sorption of metals in the leachate to biosolids at the Sanford WWTP and whether application to agricultural land would still be permitted.
- Since the last ERAC meeting, Elaine Chiosso provided committee members with the Hazen and Sawyer study that used a mathematical model to predict the association of metals with biosolids. Dan LaMontagne also had forwarded to committee members the list of metals being monitored by the Sanford WWTP.
- Sherri noted that far fewer metals being monitored at the Sanford WWTP than likely to be found in the coal ash leachate.
- Sherri pointed out that the Hazen and Sawyer report indicates several metals on the permit list for biosolids application to agricultural land are predicted to be pushed near the maximum allowed by coal ash leachate discharge to the Sanford WWTP, i.e., these are "overallocated, most notably lead (Pb)."

- Sherri also pointed out that vanadium, chromium and strontium are present in significant amounts based on the nationwide survey of coal ash leachate by DOE-EPRI but were not included in the mathematical model used by Hazen and Sawyer.
- Fran DiGiano suggested that the Hazen and Sawyer report most likely only examined those metals currently on a regulated list which is based on presence in traditional industrial wastes that enter a publicly owned treatment works (POTW). He noted that the coal ash leachate entering a POTW is certainly a new type of waste that raises new questions.
- Dan LaMontagne said that to the best of his knowledge, no formal agreement has yet been reached with Sanford to accept the coal ash leachate.
- Jerry Cole proposed the following action plan by ERAC: questions about the fate of metals should be finalized by ERAC and sent along to the Sanford WWTP and to Hazen and Sawyer. The idea would be to apprise them of our review of the nationwide study of coal ash leachate by DOE-EPRI and our concern that the nontraditional nature of this waste source should be cause for more careful study of the fate of metals not currently on a regulation list.
- Jerry also urged all ERAC members to look carefully at how the Hazen and Sawyer report assesses the compartmentalization of metals and in particular, at the prediction that Pb from leachate could possibly cause the biosolids to be unacceptable for agricultural land application.

Update on SolarBee Project

- Fran DiGiano provided a handout showing three summary bar graphs of data available at the DENR portal http://portal.ncdenr.org/c/document_library/get_file?uuid=43cc022b-6de5-4730-8fba-0244d5465ee9&groupId=38364
- In looking at the bar graphs, Terry Schmidt noted that Figures 1 and 2 were reversed or that the two boxes shown on the map to indicate sampling sites for these figures were reversed. Fran agreed to ask DENR to clarify the confusion.
- Putting the above error aside, Fran pointed out that the general idea of the graphs is to use the Chlorophyll-A (Chl-A) concentration at sampling sites as a measure of algal population. The SolarBees are only installed on Morgan Creek and NOT on New Hope Creek. Thus, the latter is considered the "control" site in each of Figures 1 and 2.
- Similarly, with regard to Figures 3, Chl-A is compared for two stations on the Haw River Arm, i.e., with and without SolarBees
- Fran pointed out that there is no compelling evidence from examining all three figures that SolarBees have lowered the algal growth.
- Fran explained that the blue-green algae (cyanobacteria is proper scientific notation) are targeted for reduction by SolarBee technology by use of gentle vertical mixing to disrupt positioning of algae. Scientific studies have shown that blue-green algae are known to auto adjust positioning for growth unlike other species.
- He had asked Dr. Ken Hudnell of Medora Corp., producer of the SolarBee, to explain why the device was not successful. Hudnell said that algal speciation measurements during the same time period showed blue-green algae were not dominating as had been expected at the start of the project. Since SolarBees specifically disrupt growth of blue-green algae, any reduction in the already low count of blue-green algae would make little impact on Chl-A concentration.
- Fran also asked Dr. Hudnell to rationalize State funding of the SolarBees for another three years given data that shows no effect. Hudnell said that algal population dynamics greatly depend on natural conditions during each growing season. Thus, it could be blue-green algae will dominate in subsequent years. According to Hudnell, DENR records had shown their dominance in some past years (Fran said data to support his claim would need to be verified).

Updates from County Staff

- Dan announced that North Carolina General Assembly Session Law 2015-246, House Bill 44 and Session Law 2015-286, House Bill 765 were signed into law in September 2015. Both will take power away from local governments to have stricter environmental rules than required at the state level.
- [Secretary's note: Session Law 2015-246, House Bill 44 is AN ACT TO REFORM VARIOUS PROVISIONS OF THE LAW RELATED TO LOCAL GOVERNMENT. A specific section is § 143-214.23A. Limitations on local government riparian buffer requirements. Within this, it states *Except as provided in this section, a local government may not enact, implement, or enforce a local government ordinance that establishes a riparian buffer requirement that exceeds riparian buffer requirements necessary to comply with or implement federal or State law or a condition of a permit, certificate, or other approval issued by a federal or State agency.*]
- Dan pointed out that the current Chatham County Riparian Buffers to protect Jordan Lake exceed those in the Jordan Lake Rules set by the state and so would require roll back. Cary, Apex and Holly Springs would likewise be affected.
- Dan also pointed out that under this new law, the riparian buffers would only be required for protected watersheds.
- Ray added that legal challenges are very likely
- [Secretary's note: Session Law 2015-286, House Bill 765 is AN ACT TO PROVIDE FURTHER REGULATORY RELIEF TO THE CITIZENS OF NORTH CAROLINA BY PROVIDING FOR VARIOUS ADMINISTRATIVE REFORMS, BY ELIMINATING CERTAIN UNNECESSARY OR OUTDATED STATUTES AND REGULATIONS AND MODERNIZING OR SIMPLIFYING CUMBERSOME OR OUTDATED REGULATIONS, AND BY MAKING VARIOUS OTHER STATUTORY CHANGES. A specific section is "§ 143-214.7C. Prohibit the requirement of mitigation for impacts to intermittent streams. Within this it states, *Except as required by federal law, the Department of Environment and Natural Resources shall not require mitigation for impacts to an intermittent stream.*]
- Ray Bode suggested that the banking industry, which handles mitigation funds, would obviously protest the loss of mitigation requirements
- Sherri asked if, with this apparent lowering of local environmental standards, whether there is any way that a county can ask developers to exceed requirements of state environmental laws. In general discussion, commissioners may have some leverage to ask for environmental controls that exceed state requirements but it must be voluntary.
- Dan announced the Department of Environment and Natural Resources (DENR) is now officially the Department of Environmental Quality (DEQ).

Adjournment

- After a motion by Mary Beth, seconded by Sherri, the meeting was adjourned at 8:30 PM

Next meeting will be November 12th at 6:30 PM.