DIVISION OF WATER QUALITY
WATERKEEPER ALLIANCE PETITION STAKEHOLDER MEETING

MINUTES

Date: July 8, 2008
Time: 10:00 a.m.
Location: DENR Training Room, 2728 Capital Blvd, Raleigh

Moderator: Kim Colson, NC DWQ

Handouts: Agenda
Minutes/notes from June 16, 2008
Combined IRR-2 Form
Key Points – Waterkeeper Alliance vs. US EPA 2nd Circuit Opinion
Proposed Sampling Schedule/Plan

- Passed around sign-in sheet.
- Reviewed June 16, 2008 meeting notes.
- Reviewed May 2008 EMC-Water Quality Committee motion on the petition
    - The rules presented by staff at that time had been developed in consideration of the petition with minimal stakeholder input. WQC asked that staff gather stakeholder input and come back with a revised rule proposal.
    - It is staff responsibility to gather and incorporate feedback as is appropriate and resubmit.
    - A consensus among all stakeholders is not required, although always desirable.
- Establishment of terms – to clarify confusion that came to light in the last meeting. Rather than use the term discharge freely, it needs to have a qualifier. i.e. discharge of pollutants from surface runoff, discharge of waste …
    - The issue of the agricultural storm water exemption was carried over this meeting from 6/16/08 meeting. Anita LeVeaux reviewed key points of the 2nd Circuit Court Decision Waterkeeper Alliance v. US EPA 2005 as related to ag storm water exemption
        - Application must be consistent with NMP's & BMP's
        - Question: so that says that if waste is applied properly and then rainfall comes that causes a discharge of pollutants, it is exempt? Anita replied yes IF applied correctly. Refer to the Southview Farms case where the court held that application done properly.
        - NMP's are the centerpiece for proper management for industry.
        - Jeff Odefey stated that the ag storm water exemption is federal and only applies to the few federal permitted facilities and not those under state general permits.
        - Others stated that the phase 2 storm water rules do reference the ag storm water exemption.
        - Kim stated that all permits are related to the federal permit rule because the duty to apply is based on point source discharge.
    - It is important to note that a discharge of storm water may carry some pollutants but not necessarily be a point source of waste. Same is true for groundwater discharge to surface waters. Key is to be consistent when talk about the issues.
    - Question: natural leaching is not a discharge? Not a discharge of waste. But if a short circuit to a drain tile occurs, this is the same as ponded waste being flushed off by rain is a discharge.
    - Revisited discussion of visual observation and sampling flow for waste discharge vs. monitoring for pollutants.
    - Purpose of monitoring data collection was discussed. Is it an exercised just to gather data or is it seeking enforcement options?
        - Deanna Osmond – data shows pollutant losses regardless of type of amount of fertilizer use, if any.

        - Jeff – Not if following NMP. Doesn't expect zero readings. Sees this as mechanism to have a better understanding of flow leaving these permitted facilities. Looking for a picture of the level of nutrients and pollutants leaving a site. Attempt to evaluate the effectiveness of permit activities to achieve requirements.
        - Determining source of nutrients, pollutants, etc. Monitoring proposed to narrow down sources that ambient monitoring has not been able to do so far. Groundwater is a large contributor to stream flow and perhaps nutrient loading.
        - Kraig Westerbeek – monitoring is inherent to current permit requirements to show compliance (record keeping, inspections, etc)
        - Pork Council doesn't believe EMC asked for rules to test effectiveness of waste plans but rather to improve WQ on basin basis. Research is already being done for that
        - Aspects of all these things are involved and use may not be exclusionary. Petition is specific to permitted facilities and sampling locations need to be selected to show the affect of the activities separate from background.
        - Need to include soils information for data to have value. A control site with same soils, stratigraphy, topography, BMP's etc would be best.
        - Note: most of the sampling we are talking about is surface water not groundwater.
    - Distinguishing between Pollutant Discharge and Waste Discharge
        - Based on the discussion today: from now on, we'll not refer to monitoring a "discharge" unless it is in reference to an observed discharge of waste. Otherwise we are talking about just the monitoring of surface water and its constituents or pollutants.
        - The introduction of pollutants through storm water flow is not inherently a violation.
        - Purpose of the petition is not just to find loadings that are precipitation driven, but also looking for the dry weather flows from tiles, etc associated with waste application.
        - Kim – realizing that all activities can be performed according to the plan and still have pollutants leave with the groundwater flow and not be a "discharge"
    - Short circuiting
        - DWQ is calling short-circuiting the situation where waste applied to a field rapidly/directly enters the underground drains and flows to surface outlet. Groundwater flow that breaks out or seeps is not short-circuiting as we define it.

BREAK

- Monitoring Plan – handout from Kim showing new ideas on sampling scheme for surface water monitoring.
    - See plan as needing to be specific to individual farms as well as value in simplicity in a general requirement. Complexity can be added based on situation, but overall plan needs to be well thought out.
    - What if we start with simple sampling plan – ex. 3 sampling sites per farm site to be determined by DWQ 3 times a year, but keep the other technical language in the rules as a mechanism to fill in when the basic scheme is insufficient.
    - First looking for comments on this approach rather than the specifics of it.
        - Not seeing the upstream/downstream to isolate farm impacts
        - Perhaps needs additional location to capture background
        - Timing of sampling is designed to capture a range of conditions
        - Any consideration to the level of flow at time of sampling? Base flow vs. storm flow
        - What about sites without adjacent streams, the sample location may have other influences. Waterkeeper Alliance not as concerned about facilities that aren't on a stream/ditch – more focused on sites like what you find in the coastal plain.
        - Time of year for the sample and for the associated waste application may affect the results. i.e. if one farmer does April sampling and another does sampling in September.

- For the sampling tied to waste application, we didn't want to specify a short window and force a waste application that may not be appropriate. Perhaps we should consider a seasonal window.
- Permit requires inspection within 24 hrs after 1" rainfall; why not plan sampling based on this? Also, new performance standard rule 2T.1308 (?) requires quarterly inspection – could be tied to this for those facilities.

  - Flow measurements as well as concentrations to determine loading rates. There's concern about accuracy of individual farmers estimating flow.
    - Should someone besides farmer even be taking the samples?
    - Other data sets (USGS gauging stations, etc) to estimate flow would be a stretch due to many things, rainfall variability for one.
    - The advantage of coalitions would reduce these challenges. A coalition would have a consultant to take samples/readings more accurately and efficiently. Other permitted groups find coalition monitoring to be cost neutral but it does take away the task for each individual. Because of the favorable response from point sources using coalitions, we wanted to keep in as an option.
  - May have to take into account sites without stream nearby, and then look at groundwater.
  - Pork Council – concern is that if you use a limited number of samples, QC is questionable, especially with no comprehensive plan. This will lead to poor quality data from a lot of different farms that will be of no use. But not suggesting adding more – gets very costly in time and money for farmers.
  - Kim – this proposed plan puts the burden on the Division to select proper location. We must find a balance between simplicity and getting most valuable data.
- Not ambient watershed monitoring.
- Issues around frequency proposed? The idea was to capture different conditions that are representative. Is three times enough?
  - Depends on rainfall and flow. Drought years vs. wet years. In dry years there's low flow and monitoring may not show the activity. But a heavy rain event (hurricane) can act to flush out the nutrients. Neither is "representative".
  - Jeff – need to increase the number and description of when to sample. 6 is better than 3. Also, there may not be a window where there's 30 day between applications. Suggest sampling during/immediately after application and after rainfall event that follows land application.
  - Consider costs. Is it 6 per farm site? 6 per field? Can run into money.
- Is the priority the number of locations or the number of samples? Temporal vs. spatial?
  - Will the number of locations deal with the site size? Number of ditches/streams adjacent to site?
  - By using the up to three, it allows us to let a farmer know the most required of him.
  - Do you consider the history of the site? Years used for waste application – new spray field or in use for long time? What other applications have been made – poultry litter, municipal land app?
  - The original language referred to the rate in the plan vs. the rate applied. Want to keep it in to allow for adjustments and show the percent utilization.
- Will this be inserted into the rule language or just in the way the rule is implemented?
  - Yes we are looking to insert some type of structured scheme in to the rules, but also leave in the technical language to allow other plan when it's called for by site conditions.

- Perhaps we should plan to start next meeting at this point; discussing the sampling scheme.
  - Consider for next time is this type of simple plan a place to start? Farmers need to know what to expect. What site considerations to account for.
  - Anne – What will data be used for? Just sit in a file? This is too much time and money for data not to be used. But we need to know what the data really represents and that it's quality. Are data comparable? Can conclusions even be made based on the data?

  - Think about what parameters to sample.
    - Should we do total N (not TKN) or do NH3 and NO3 separately? Is there value in collecting both? YES
    - Reactive orthophosphate valuable to sample vs. total phosphate? Could be.
    - BOD5 – only valuable for a discharge of waste.
    - Fecal – difficulty in holding times. Can farmers collect the data and reach a lab in the required hold time?
- Send in thoughts/comments.
- Next meeting July 31 with the first State General Permit renewal Stakeholder Meeting to follow.