



## North Carolina Department of Environment and Natural Resources

Division of Water Quality  
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Director

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**DRAFT**

October 31, 2009

**MEMORANDUM**

To: Aquifer Protection Section Chief  
Surface Water Protection Section Chief  
APS Regional Supervisors  
SWS Regional Supervisors

From: Coleen Sullins

Subject: Division of Water Quality (DWQ) Approach to NPDES Facilities with Storage of Coal Combustion Products in Ash Ponds

In the past several years, EPA has voiced concerns regarding the potential environmental impacts due to storage of Coal Combustion Products (CCPs) in ash ponds. In 2006, Utility companies nation-wide committed to adopting groundwater-monitoring programs at their facilities with CCP units, and to share their data with both state and federal agencies. North Carolina power companies, Progress Energy and Duke Energy, both committed to establishing groundwater monitoring programs for their permitted facilities with ash ponds. This data is now submitted to the Division of Water Quality (DWQ), Aquifer Protection Section (APS) on a routine basis.

Since ash ponds are permitted under the purview of the Division of Water Quality, it is the Division's responsibility to ensure that these facilities are in compliance with all established regulatory requirements. While it is standard practice for the Division's Sections to be responsible for the compliance and enforcement of their own defined programs, the Division is first and foremost committed to the protection of all waters of the state. In light of this, the Division recognizes that many of the permitted facilities with ash ponds may have both groundwater and surface water concerns. Thus the combined efforts of both the Aquifer Protection Section and the Surface Water Protection Section may be required to ensure all state regulatory requirements are met.

Guidelines are established below to define responsibilities for both the compliance and enforcement of ash ponds at NPDES permitted facilities. This includes when groundwater standards are violated past the regulatory boundary of the waste disposal area (e.g. Compliance Boundary as defined in 15A NCAC 2L .0107), when groundwater monitoring wells show groundwater standard exceedances but are still within the established Compliance Boundary, and when the Compliance Boundary falls inside of or at the edge of surface water and potential surface water standard exceedances exist.

1. Initial Evaluation. APS will evaluate the location and construction of groundwater monitoring wells that are currently being sampled on a voluntary basis, to ensure the locations take into account all relevant hydrogeological factors influencing the potential for contaminant movement. APS will also evaluate the constituents being sampled, as well as laboratory analytical methods. Any changes to the number or location of wells, constituents to be sampled, and or frequency of how often a well is sampled will be addressed by APS as described below.
2. Permit Conditions. Any additions to the NPDES permit addressing well construction, well abandonment, groundwater sampling or reporting is preferably done during the established permit review period. Regional Offices, after performing a site review and review of all applicable documentation, will submit their recommended permit changes to the NPDES reviewer through the APS Central Office coordinator.
  - a. Changes outside the permit review period, as described in paragraph 2 above, can be done at any time if the permittee is willing to accommodate Division requests through written correspondence from the Division. However, all correspondence must be coordinated with the permitting agency (e.g. NPDES Section) and copies of the correspondence must be filed in the permit folder.
  - b. If the permittee is not willing to make changes outside the permit review period upon receipt of Divisional requests, staff can either seek an administrative amendment to the permit which must be signed by the Division Director, or wait until the permit review period is open, and make recommended changes at that time.
3. Review of Groundwater Monitoring Data. APS will review the submittals of monitoring groundwater data at or beyond the Review Boundary (as defined under 15A NCAC 2L .0108). If there are exceedances and:
  - a. the well is inside the Review Boundary, APS will require the permittee to construct a well at the Review Boundary, if permitted after December 30, 1983, or at the Compliance Boundary, if permitted before December 30, 1983.
  - b. the well is at or beyond the Review Boundary, but inside the Compliance Boundary, APS will require the permittee to take actions in accordance with 15A NCAC 2L .0106(d), if permitted after December 30, 1983; or require the permittee to construct a well at the Compliance Boundary, if permitted before December 30, 1983.
  - c. the well is at or beyond the Compliance Boundary, APS will require the permittee to take corrective action in accordance with 15A NCAC 2L .0106(d), if the permittee meets all requirements under 2L .1016(e); or 15A NCAC 2L .0106(c), if the permittee does not meet all requirements under 2L .1016(e);

COMPLIANCE OF SURFACE WATER STANDARDS

If groundwater monitoring data that exceeds groundwater standards is submitted from a well at the edge of surface water (e.g. well located on the berm of the dam) or the established Review or Compliance Boundary falls inside surface water and the well cannot be located as defined above (e.g. at the Compliance Boundary), APS will notify the NPDES Branch of the exceedances in writing and no longer monitor the well.

- a. The NPDES compliance and enforcement branch will notify the permittee of the groundwater exceedances and establish a surface water monitoring schedule, and if warranted, sediment sampling schedule, to determine if surface water standards have been exceeded.
- b. The NPDES compliance and enforcement branch will take any follow-up enforcement actions, as deemed necessary

OVERLAPPING COMPLIANCE BOUNDARIES

If the compliance boundary for a NPDES permitted ash pond overlaps with a compliance boundary for a permitted facility by an agency outside the Division of Water Quality, and the wells monitoring the NPDES facility is showing exceedances to the groundwater standards, any necessary enforcement actions will be coordinated with the agency outside of the Division of Water Quality.

cc: Chuck Wakild  
APS Regional Supervisors  
SWS Regional Supervisor