Duke Energy Ash Ponds
EPA Assessment Update
September 4, 2013

Purpose: The following is a response by the Division of Energy, Mineral, and Land Resources (DEMLR) to the US Environmental Protection Agency's (EPA) structural integrity assessments of the surface impoundments containing coal combustion residuals at electric utilities located in North Carolina. The assessment was forwarded to DEMLR on August 13, 2013.

Poor Condition Dams:

Definition: Considered unsafe. A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution. Reservoir restrictions may be necessary.

1. Asheville Plant 1964 Ash Pond Dam (BUNCO-097): This dam has been repaired since the EPA report was issued. Final approval of repairs was issued by the Division on April 18, 2013.

2. Cape Fear Plant
    a. 1985 Ash Pond Dam (CHATH-079)
    b. 1978 Ash pond Dam (CHATH-078)
    c. 1970 Ash Pond Dam (CHATH-077) - Inactive
    d. 1963 Ash Pond Dam (CHATH-076) - Inactive
    e. 1956 Ash Pond Dam (CHATH-075) - Inactive

    Historic inspections by LQS staff have not revealed significant enough deficiencies at these dams to warrant repairs. The 1985 pond dam was cleared of vegetation to promote inspection due to geotechnical concerns but there have been no signs of distress at this dam noticed by LQS staff. The Cape Fear plant has been taken out of service by Duke Energy. Duke Energy is currently planning to decommission all ash ponds on this and other plant site, both active and inactive. Duke has selected design consultants and has scheduled submittal of preliminary engineering reports to the Division for this task in January or February of 2014.

Fair Condition Dams:

Definition: Acceptable performance is expected under all required loading conditions (static, hydrologic, seismic) in accordance with the applicable safety regulatory criteria. Minor deficiencies may exist that require remedial action and/or secondary studies or investigations.

1. Dan River Plant Primary (ROCKI-237) and Secondary (ROCKI-238) Ash Pond Dams: Seepage repair on both of these dams have been completed since issuance of the EPA report. Final approval of repairs was issued by the Division on January 28, 2013. LQS inspections since this date have not noted any significant deficiencies.

2. Marshall Station Active Ash Basin Dam (CATAW-054): Engineering studies reported in October, 2010, after the EPA report, indicated an acceptable factor of safety for downstream slope stability. Several minor slope erosion repairs have been made in recent years. LQS inspections to date have not noted any significant deficiencies.

3. Belews Creek Active Ash Basin Dam (STOKE-116): Seepage repair on this dam has been completed since issuance of the EPA report. Final approval of repairs was issued by the Division on April 12, 2013. LQS inspections since this date have not noted any significant deficiencies.

4. Roxboro FGD Settling Pond Dam (West) (PERSO-040): This dam failed upon first filling prior to January 1, 2010 when Senate Bill 1004 took effect. Repairs were completed and final approval of repairs was issued by the Division on June 7, 2011. LQS inspections since this date have not noted any significant deficiencies.

5. Roxboro FGD Flush Pond Dam (PERSO-042): This dam was completed just prior to January 1, 2010 when Senate Bill 1004 took effect. LQS inspections to date have not noted any significant deficiencies. Note that this is a relatively small reservoir and would be contained by the Roxboro West Ash Pond Dam (PRESO-038) in the event of failure.

6. Lee Plant Active Ash Pond Dam (WAYNE-022): LQS inspections to date have not noted any significant deficiencies.

7. Lee Plant Inactive Ash Pond Dam (WAYNE-032): This dam is not high hazard and was exempted from the Dam Safety Law effective July 1, 2011 by House Bill 119.

8. Weatherspoon Plant Ash Pond (ROBES-009): This dam is not high hazard. Seepage repair on this dam has been completed since issuance of the EPA report. Final approval of repairs was issued by the Division on October 12, 2011. LQS inspections since this date have not noted any significant deficiencies.

END

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