

October 31, 2007

MEMORANDUM

To: Larry Frost

From: Brian Wootton

RE: Final Comments – Closure Plan – Pine Hall Road Ash Landfill
Duke Energy – Belew's Creek Steam Station
Stokes County
Permit No. 85-03
Post Closure Monitoring

Ervin Lane and I have reviewed the Closure Plan for the Pine Hall Road Ash Landfill pertaining to hydrogeology, ground-water and surface water monitoring. Drawing 1 of 1, titled "Groundwater Sampling & Analysis Plan", dated 10/8/07, included in the Closure Plan, states the following in the legend portion of the drawing:

Groundwater Monitoring Wells
And Surface Waste Sample Locations
In Sampling and Analysis Plan

Groundwater Monitoring Wells
and Surface Water Sample Locations
to be abandoned

Existing Wells

MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW2-9
OB-9

Proposed Wells:

MW-1D (Screened Below Refusal)
MW-7 (Screened at GW Surface)

Existing surface Water Sample Locations:

SW-2

Wells to be Abandoned

MW2-1
MW2-2
MW2-3
MW2-4
MW2-5
MW2-6
MW2-7
MW2-7A
MW2-8
MW2-10
OB-1
OB-3
OB-4
OB-5
OB-6
OB-7
OB-8

Surface Water Sample Locations to be Abandoned

SW-1
SW-1A

Notes:

- 1) These existing wells are not impacted by Construction and are located outside of the Ash Basin Review Boundary.
- 2) MW-3 will continue to be used as a background well.

Notes:

- 1) These existing wells are impacted by construction or are located inside of the Ash-Basin Review Boundary.
- 2) Well OB-2 was destroyed by construction activities during completion of the landfill.

We recommend the following conditions be included in the closure and post-closure phase of this landfill:

1. The following ground-water monitoring wells shall be abandoned:
MW2-1, MW2-2, MW2-3, MW2-4, MW2-5, MW2-6, MW2-7A, MW2-8,
MW2-10, OB-1, OB-3, OB-6, OB-7, OB-8.
2. These ground-water monitoring wells shall be properly abandoned in accordance with 15A NCAC 2C.0113(b)(1), titled "Abandonment of Wells".
3. Well abandonment records for each ground-water monitoring well abandoned shall be certified by the permit holder's geologist and submitted to the Solid Waste Section in accordance with 15A NCAC 02C.0114(b).
4. The Solid Waste Section (SWS) approves the installation and sampling of proposed monitor wells MW-1D and MW-7. Ground-water monitoring well MW-1D shall be constructed such that the well screen is located below auger refusal (into bedrock), Ground-water monitoring well, MW-7 shall be constructed such that the well screen brackets the ground-water potentiometric surface.
5. The owner's geologist shall be in the field to supervise all ground-water monitoring well installations. Any modifications to these conditions shall require approval by the Section Hydrogeologist. Documentation of all changes to the approved plan shall be submitted with the well construction records.
6. For each well constructed, a well construction record, well schematic, boring log, and a description of well development activities shall be submitted to the Section within 30 days of well completion.
7. After well completion, provide a scaled map depicting the location of the new ground-water monitoring wells; existing ground-water monitoring wells, and abandoned ground-water monitoring wells.
8. Ground-water monitoring wells, MW2-7, OB-4, OB-5 shall remain in place and continued to be sampled.
9. Continue to sample the following ground-water monitoring wells: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-MW2-9, and OB-9.
10. Continue to sample surface water locations, SW-1 and SW-2. Discontinue surface water sampling point SW-1A.

11. Ground-water and surface water samples should be analyzed for Appendix 1 constituents in addition to currently analyzed constituents semi-annually. Appendix 1 analytical data will be evaluated, and based on results, the Compliance Branch of the SWS may not require continued Appendix I analysis.

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Please contact me with any questions or comments. I can be reached at (919) 508-8524 or by e-mail.

Sincerely,



Brian Wootton

cc: Ed Mussler, Solid Waste Section
Ervin Lane, Solid Waste Section
Central Files