

January 11, 2006

MEMORANDUM

To: John Murray

From: Brian Wootton

Subject: Application for Permit to Construct,
Cabarrus County – C&D Landfill
Proposed Expansion – 7.6 acres
Design Hydrogeologic Study - Final Comments
Water Quality Monitoring Plan – Additional Information Requested
Permit No. 13-02

I have reviewed the Permit to Construct Application (proposed expansion of 7.6 acres) in part for hydrogeologic concerns. The application was received on May 5, 2005 and subsequent supporting information received on January 6, 2006. **The Study and supporting information meets the criteria required in the Rules [(i.e. 15A NCAC 13B .0503(2), 15A NCAC 13B .0504(2), 15A NCAC 13B .0505(7)(a), and Solid Waste Section policy]; therefore, I have no objection to issuance of this portion to Permit to Construct based on these rules.**

Prior to construction activities commencing, the Solid Waste Section requests the following information is addressed from the permittee.

Prior to construction of cell(s), all piezometers, ground-water monitoring wells, and borings, located in the proposed cell(s), are to be abandoned (sealed) by overdrilling first (exception of non-cased borings) and sealing each with cement grout according to 15A NCAC 2C .0113 (b)(1), "procedures for permanent abandonment of wells". In portions of the site where soil areas to be undercut, do not grout the wells up to pre-grade land surface, but up to proposed base grade surface in order to prevent cutting off excess vertical grout and possibly damaging the grouted wells.

Submit copies of Well abandonment records for each piezometer, ground-water monitoring well, and boring abandoned according to 15A NCAC 02C. 0114(b).

Construction Conditions: (Include these conditions in the Permit to Construct)

The owner's geologist shall examine the cell excavation and note any pertinent geologic features exposed during the construction process and shall notify the

Solid Waste Section Hydrogeologist of these findings prior to placement of any liner materials.

The owner's geologist shall be in the field to supervise all well installations. Any modifications to the approved water quality monitoring plan require approval by the Section Hydrogeologist. Documentation of all changes to the approved plan shall be submitted with the well construction records.

For each well constructed (i.e. new ground-water monitoring wells, MW-CD-1, MW-CD-2, MW-CD-3, and MW-CD-4), 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. MW-CD-1, MW-CD-2, MW-CD-3, and MW-CD-4 shall be constructed such the well screen brackets the water table. As noted in the permit application (Section 14.3.1 - Water Quality Monitoring plan), existing deep ground-water monitoring well, B-13 will be converted to permanent deep monitoring well by the addition of a steel locking protective riser. BC-13 shall be renamed MW-CD-1d. Submit documentation when the BC-13 is modified.

Pre-Operational Condition: (Include this condition in the Permit to Construct)

Ground water monitoring wells and surface water sampling locations shall be sampled for the Appendix 1 (VOC's and RCRA Metals) constituents list prior to issuing the Permit to Operate.

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
Central File