

MEMORANDUM

To: Jan McHargue

Date: December 16, 1994

From: Jim Bateson 

cc: Bobby Lutfy 

Subject: N. Mecklenburg C&D Landfill; Hydrogeology.

I have reviewed the responses of Frank B. Hicks Associates, Inc. and ESI, Inc. included in the November 22 package. Some modifications will be needed in their application before a final version can be approved by the Solid Waste Section:

1. Grading limits in the center of the proposed C&D cell still do not allow for a four foot vertical separation between fill and seasonal high groundwater levels. This lack of separation occurs only in the lowermost part of the cell, proposed to be a flat area at 692 feet. Groundwater levels have been measured at 691.86 feet and 688.29 feet in this area. If no estimate of *long term* variation of seasonal high groundwater levels is to be provided, the section will require that grading contours be no lower than 700 feet. In the area of MW-3, this represents a vertical separation of 4 plus 5.14 feet. Maximum variations among readings at MW-2 and MW-6 were 4.41 feet and 8.41 feet, respectively.
2. The top of casing elevation given for MW-2 is less than the corresponding ground elevation indicated by topographic contours. Since groundwater elevations from MW-2 are anomalous, the data should be rechecked. The Section will need a new version of the piezometric surface map, based on corrected groundwater levels, preferably from one of the May sampling events.
3. The Solid waste section does not normally approve monitoring wells with screen intervals greater than 15 feet. Also, monitoring wells should be constructed with the top of the 10 to 15 foot screen just above the seasonal high water table. A new monitoring plan with well construction information needs to be submitted. The operator may choose to monitor the bedrock aquifer in the area near the Council well.
4. The Solid Waste Section will allow the placement of LCID waste within the 500 foot buffer surrounding the well on the adjoining Council property. The Section will not permit the placement of LCID waste within the 200 foot buffer just inside the proposed site boundaries.
5. The Solid Waste Section has recently revised the list of constituents, and their PQL's, required for groundwater monitoring of C&D landfills. The consultants may wish to include the attached list of minimum *Sampling and Analysis Requirements* in their proposed monitoring plan.