

I have performed a preliminary technical review of the Design Hydro Report submitted to the NC Solid Waste Section in hard copy format on May 28, 2015, and have the following comments:

Please construct new drawings representing the current site condition at area Phase2A, including:

- 1) A topographic map illustrating the most current base grade elevation contours for Phase 2A. (Is this the data shown on Drawing S1? Drawing M1? Drawing S6? If so, the dates of the drawings and the supplemental land survey information on the drawings do not match). Please do not superimpose new base grade elevations over old contour maps illustrating site conditions from the 2002 Site Suitability Report as it is difficult to read and interpret the drawings containing multiple layers of superimposed data. 15A NCAC 13B .0538(a)(10).
- 2) After a new clean drawing illustrating current base grade elevation data is constructed, please provide a drawing superimposing estimated long-term seasonal high water table over current base grade elevations which includes the location of test pits dug in March 2015 and includes the location of all other relevant borings, piezometers and groundwater monitoring wells. 15A NCAC 13B .0538(b)(2)(E). This drawing should clearly reflect that there is four feet of vertical separation between current base grades and top of estimated long-term seasonal high groundwater.
- 3) Please construct new stratigraphic cross-section drawings reflecting the most current hydrogeological conditions at the site including: 1) the current base grade elevations at area Phase 2A; 2) the top of bedrock and overlying geology/stratigraphy beneath Phase 2A using historical boring/piezometer/groundwater monitoring well data and specifically including the new stratigraphic information collected from the March 2015 test pits; and 3) elevation of estimated long-term seasonal high groundwater table. The cross-sections provided in the May 2015 Design Hydro Report contain many layers of data superimposed on top of each other (i.e., original ground elevations and original base grade elevations from the 2002 Site Suitability Report) and is difficult to review and analyze. Additionally, the new test pit locations and stratigraphic data collected in March 2015 were not represented on the cross-sections provided in the May 2015 Design Hydro Report. 15A NCAC 13B .0538(b)(2)(G).

The purpose of these drawings, and one of the major objectives of the Design Hydro Report, is to demonstrate the required minimum four foot vertical separation between post-settlement bottom elevation of waste and elevation of seasonal high groundwater table. 15A NCAC 13B .0540 (2) CONSTRUCTION REQUIREMENTS FOR C&DLF FACILITIES.

Please provide a log on each test pit dug in the Phase 2A illustrating the stratigraphic soil information including soil symbol and description of the soils encountered in each test pit and include a discussion in Section 1.3 Test Borings/Test Pits 15A NCAC 13B .0538(b)(2)(I).

Do the topographic contours on Drawing M-1 reflect current (April 2015) site conditions? If so, the sheet needs to clearly state that the contours are based on a land survey conducted in April 2015 and the drawing date on the sheet needs to be changed to April 2015 from March 2015. This drawing is located in the Design Hydro Report, Water Quality Monitoring Plan, and Landfill Gas Monitoring Plan and should be revised or replaced in all three of the reports.