

2006-05

**Chronology of Hydrogeologic Activities**  
**From December 2003 - February 3, 2005 (Date Phase 2 Report Approved)**  
**Chesapeake Terrace Rubble Landfill**

Prepared 7/6/06  
For Chesapeake Terrace/National Waste Managers (Applicant)  
By Mark Schultz Associates

- 12/5/03      Applicant's consultants submit a hydrogeologic report to the MDE that provides comprehensive responses to the comments in the MDE's letter of August 5, 2002. The report describes the installation and testing of fifteen monitoring wells, hydraulic conductivity analyses, geotechnical analyses, groundwater level projections, liner stability analyses, and calculated impacts on nearby residents and ecology. Numerous simulations are presented from a computer groundwater flow model (MODFLOW) in order to predict the impacts of mining and landfilling. The report submitted to the MDE includes 30 pages of text, 17 figures, 11 large plates, 11 tables, and 13 appendices that include water level and aquifer analysis test data, well logs, soil stability and hydraulic conductivity test analyses, floodplain analysis, a residential well inventory, perched water table control plans, USGS hydrograph data, and a groundwater flow model with four impact scenarios, two when the landfill is operating and two post-closure.
- 2/19/04      Applicant's consultants Mark Schultz and Mike Armstrong meet with Mr. Mark Filar the Chief of the MDE's Water Management Administration to discuss the need for a water appropriation permit for cell and impoundment dewatering. At the Applicant's invitation, Kassa Kebede and Martha Hynson of the MDE's Solid Waste Division attend the meeting. A format for submitting the application for the water appropriation permit is agreed upon. Mr. Kebede offers that he is still reviewing the Applicant's 12/5/03 submittal and that he will need another month or two to complete his review. He states that his primary outstanding concerns are with issues related to wetlands and endangered species rather than site hydrogeology.
- 2/19/04      Applicant's consultant Mark Schultz relates Mr. Kebede's concerns relative to wetlands and endangered species to Applicant's wetland's consultant McCarthy & Associates. McCarthy & Associates contacts Maryland DNR to request a meeting to insure that their concerns are being addressed.

- 3/18/04 Applicant's consultant MSA submits an application for a water appropriation permit to the MDE's Water Management Administration along with a hydrogeologic report describing and quantifying the appropriation request.
- 4/16/04 Board of Appeals grants two year extension of time.
- 5/18/04 Applicant's consultant MSA receives letter from the MDE's Water Management Administration requiring notification of the adjacent property owners of the water appropriation request.
- 6/9/04 Applicant's consultant McCarthy & Associates, Inc. submits to DNR a copy of the rare plant survey of the site conducted on June 4, 2004.
- 7/9/04 Applicant (through MSA) formally notifies adjacent property owners and the county executive via certified mail of the water appropriation request.
- 7/22/04 Applicant's consultants (McCarthy & Associates, MSA, and Century Engineering) meet with Kathy McCarthy and Roland Limpert of the Maryland DNR to ensure that all wetlands and endangered species issues have been addressed to DNR's satisfaction. Ms. McCarthy states that the only remaining issue of concern is the potential impact of the landfill on the two ponds in Patuxent Ponds Park.
- 7/23/04 Applicant's consultant Mark Schultz and DNR's Kathy McCarthy conduct a field reconnaissance of the Patuxent Ponds Park.
- 7/23/04 Applicant's consultant Mark Schultz submits Certification of Notification Form and Public Notice Billing Approval Form to the MDE's Water Management Administration in accordance with water appropriation permitting requirements.
- 7 & 8/04 Applicant's consultant MSA conducts a hydrogeologic survey of the Patuxent Ponds including bottom profiling and the installation, surveying and measurement of staff gages to establish gradients and directions of surface water flow.
- 7/26/04 Applicant's consultant's McCarthy & Associates submits to DNR a copy of the Erosion Sediment Control Plans for Chesapeake Terrace compensatory wetland mitigation.
- 8/26/04 Applicant's consultant MSA submits a hydrogeologic report to the Maryland DNR describing the history and hydrology of the Patuxent Ponds Park. The report concludes that the proposed landfill will not influence water levels in the ponds. DNR indicates that both they and the Maryland Geological Survey will review the report.

- 10/1/04 Applicant receives a letter from the MDE's Solid Waste Division stating that the MDE has completed its review of the Applicant's 12/5/03 Addendum report. The letter provides a list of concerns that still need to be addressed, many of which relate to wetlands and endangered species.
- 10/21/04 Ms. Kathy McCarthy of the Maryland DNR sends a letter to Kassa Kebede of the Solid Waste program stating that their concerns relating to endangered species and wetlands (including the Patuxent Ponds) have been addressed.
- 10/25/04 Applicant's consultant MSA responds in writing to verbal comments of the MDE's Water Management Administration regarding the water appropriation permit application submitted on 3/18/04.
- 10/27/04 Applicant's consultants meet with MDE Solid Waste Division to discuss their 10/1/04 letter and insure that the Applicant's response will complete the Phase 2 work. Mark Filar and Cynthia Latham of MDE's Water Management Administration attend the meeting and state that all of their concerns relative to the water appropriation permit have been addressed by the applicant.
- 10/28/04 Applicant's consultant's MSA submit a plan to the MDE for meeting the groundwater sampling requirement in the MDE's 10/1/04 letter.
- 11/9/04 MDE provides verbal approval of the groundwater sampling plan submitted on 10/28/04.
- 11/15&16/04 Applicant's consultant MSA conducts a groundwater quality sampling event at the landfill site per the approved plan.
- 11/19/04 Applicant meets with the MDE to discuss Phase 3 report requirements and the most acceptable format in which to submit the report.
- 12/12/04 Laboratory analytical results are received from the groundwater sampling event conducted at the landfill in mid-November 2004.
- 12/22/04 Applicant's consultants submit a hydrogeologic report to the MDE that provides comprehensive responses to the comments MDE's letter of 10/1/04 including recently generated groundwater quality data.
- 2/3/05 MDE informs the Applicant that it approves the Applicant's 12/22/04 submittal and that "the Phase 2 Geology and Hydrology Report is now considered complete."