



North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

July 1, 2010

Sent Via U.S. Mail and Email – nmarotta@wcamerica.com

Mr. Nick Marotta
Regional Engineer
WCA Waste Corporation
625 Spencer Drive
Fort Walton Beach, FL 32547

Re: *Landfill Gas Remediation Plan*
Material Recovery, LLC Construction and Demolition Landfill
Wake County, Permit #92-31

Dear Mr. Marotta:

The Solid Waste Section has completed a review of the *Landfill Gas Remediation Plan* dated May 26, 2010 submitted by Golder Associates NC, Inc. for WCA's Material Recovery, LLC Construction and Demolition Landfill located at 2600 Brown-Field Road, Raleigh, NC. In 2007, an Alternate Source Demonstration was submitted to the Solid Waste Section in response to the detection of the volatile organic compound trichlorofluoromethane in groundwater sampled from groundwater monitoring well MW-3 in June 2007. Trichlorofluoromethane was first detected during the December 2006 water quality sampling event. The Alternate Source Demonstration concluded that trichlorofluoromethane was most likely due to landfill gas to groundwater impacts. The Solid Waste Section approved the Alternate Source Demonstration in May 2008. Then in 2008 and 2009, the volatile organic compounds trichloroethene and tetrachloroethene were detected in groundwater monitoring well MW-3. For the first time during the December 2009 water quality sampling event, trichloroethene and tetrachloroethene exceeded the NC 2L Groundwater Standards.

Based upon the detections and exceedances of the volatile organic compounds, WCA proposes to install a cut-off trench located between the waste disposal unit and groundwater monitoring well MW-3 to vent landfill gas that may be migrating from the landfill and potentially impacting groundwater near groundwater monitoring well MW-3. The landfill gas trench will be approximately 225 feet long, 2-4 feet wide, and 18 feet deep. The landfill gas trench will be installed within 90 days of approval of this *Landfill Gas Remediation Plan*. If there is no indication of a decreasing trend of all three constituents trichlorofluoromethane, trichloroethene, and tetrachloroethene in groundwater monitoring well MW-3 after two years of groundwater sampling (four sampling events), then a temporary blower unit will be connected to the passive vents to accelerate the removal of landfill gas.

As a result, the *Landfill Gas Remediation Plan* is approved as described. Please implement the

1

Landfill Gas Remediation Plan within 90 days of receipt of this letter. If you have any questions or concerns regarding this letter, please contact me at jaclynne.drummond@ncdenr.gov or at 919-508-8500.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Environmental Compliance
Solid Waste Section

cc sent via email: Dennis Gehle, Facility General Manager (dgehle@wcamerica.com)
Mark Poindexter, Field Operations Supervisor
Jason Watkins, Central District Supervisor
Brad Bailey, Environmental Senior Specialist
Elizabeth Werner, Hydrogeologist
Donna Wilson, Permitting Engineer
Dusty Reedy, Golder Associates of NC, Inc.
Rachel Kirkman, Golder Associates of NC, Inc.
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