



North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

August 16, 2012

Sent Via Email – gail.licayan@greensboro-nc.gov

Ms. Gail Licayan
Technical & Planning Support Division Manager
City of Greensboro Environmental Services Department
P.O. Box 3136
Greensboro, NC 27402-3136

Re: *Phase II Corrective Action Evaluation Report*
Phase II White Street C&D Over MSW Landfill
Guilford County, Solid Waste Permit #41-03
DIN 17059

Dear Ms. Licayan:

The Solid Waste Section has completed a review of the *Phase II Corrective Action Evaluation Report (CAER)* dated May 31, 2012 (DIN 17002) and received on June 7, 2012 submitted on behalf of the City of Greensboro by S&ME, Inc. for the Phase II White Street C&D Over MSW Landfill. The *CAER* was submitted pursuant to the County's *Corrective Action Plan* dated April 2009 and approved by the Solid Waste Section on May 14, 2009. The Solid Waste Section also approved the County's selected remedy for this facility on June 24, 2008 that includes the implementation of Monitored Natural Attenuation (MNA), Phytoremediation, and maintaining consistent contours within Phase II.

The following have been implemented at the facility: new sentinel groundwater monitoring wells were installed to determine the long term effectiveness of the selected remedy, the MNA baseline has been completed at the facility, and two Phytoremediation areas (designated as Northern EBuffer and Southern EBuffer) were installed downgradient of the facility.

Within the *CAER*, the City of Greensboro provided the current status of corrective action activities within the five following areas of concern at the facility: Northern EBuffer Area, Southern EBuffer Area, Well II-6 Area, Well II-7 Area, and Well II-2 Area.

Northern EBuffer Area of Concern

The groundwater corrective action at the Northern EBuffer Area of Concern consists of MNA and Phytoremediation. The Phytoremediation area was installed between Well II-9 and Sentinel Well SMW-3. Monthly inspections of the area are being conducted to monitor tree growth, tree damage, tree mortality, and other factors. The overall tree growth and survival rates have met expectations. However, an isolated segment of poplar trees exhibited evidence of zonal dying. As a result, in 2011, 50 hybrid poplar trees were planted to replace the dying poplars. In addition, later in 2012, drainage will be improved in this area, and additional trees will be planted.

Southern EBuffer Area of Concern

The groundwater corrective action at the Southern EBuffer Area of Concern consists of MNA and

1

Phytoremediation. The Phytoremediation area was installed within Well II-1. Monthly inspections of the area are being conducted to monitor tree growth, tree damage, tree mortality, and other factors, and the overall tree growth and survival rates have met expectations in this area.

Well II-6 Area of Concern

The groundwater corrective action at the Well II-6 Area of Concern consists of MNA. Well II-6 is located between the waste boundary and the review boundary (approximately 125 feet from the waste boundary) and also upgradient of Sentinel Well SMW-4. During the 2010 and 2011 water quality monitoring events, Sentinel Well SMW-4 had no exceedances of the groundwater standards.

Well II-7 Area of Concern

The groundwater corrective action at the Well II-7 Area of Concern consists of MNA. Well II-7 is located between Well II-9 and the Sentinel Well II-10. Tetrachloroethene (PCE) and vinyl chloride are constituents of concern exceeding the groundwater standards within this Area. However, it appears that the groundwater remediation goals have been reached within this Area of Concern for two consecutive years.

Well II-2 Area of Concern

The groundwater corrective action at the Well II-2 Area of Concern consists of MNA. Well II-7 is located between the waste boundary and Sentinel Well SMW-1. Benzene, trichloroethene (TCE), tetrachloroethene (PCE), vinyl chloride, and thallium are constituents of concern exceeding the groundwater standards within this Area. However, Sentinel Well SMW-1 had no exceedances of the groundwater standards.

Conclusions

The *CAER* stated that there is adequate evidence to support natural attenuation is actively occurring at the facility, no modifications to the selected remedy are proposed, and no supplemental risk assessment is needed at this time. As a result, the *CAER* is approved as described. Please continue to conduct the following corrective action items: MNA monitoring consisting of the full suite of parameters on a semiannual basis, the BIOCHLOR model on a semiannual basis, and the monthly inspections of the Phytoremediation stands.

If you have any questions or concerns regarding this letter, please contact me at 919-707-8294 or by email at jaclynne.drummond@ncdenr.gov. Thank you again for your continued cooperation with groundwater corrective action at this facility.

Sincerely,



Jaclynne Drummond
Compliance Hydrogeologist
Solid Waste Section

cc sent via email: Mark Poindexter, Field Operations Supervisor
Jason Watkins, Western District Supervisor
Hugh Jernigan, Environmental Senior Specialist
Pat Backus, Permitting Engineer
Christine Ritter, Permitting Hydrogeologist
Connel Ware, S&ME, Inc.
Ed Henriques, S&ME, Inc.