



North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

December 9, 2010

Sent Via US Mail and Email – YIY1@RJRT.com

Ms. Yi Yongsheng
R.J. Reynolds Tobacco Company
Environment, Health, and Safety
401 North Main St.
Winston-Salem, NC 27101

Re: *Off-Site Monitor Well Locations*
R.J. Reynolds Rural Hall Ash Landfill
Forsyth County, Permit #34-05

Dear Ms. Yi Yongsheng:

The Solid Waste Section has completed a review of the *Off-Site Monitor Well Locations* letter dated November 15, 2010 (Doc ID 12351) submitted by ERM NC, PC for the closed and unlined R.J. Reynolds Rural Hall Ash Landfill. Historical and recent groundwater and surface water sampling results for the R.J. Reynolds Rural Hall Ash Landfill indicate shallow and deep groundwater contamination and surface water contamination. As a result, the *Off-Site Monitor Well Locations* letter was submitted as part of the Phase II assessment plan approved on January 12, 2010 (Doc ID 9279) located within the *Summary Report - Preliminary Site Assessment* dated October 29, 2009 (Doc ID 8861) and pursuant to a Compliance Order issued by the Division of Waste Management, Solid Waste Section on April 17, 2009. The January 12, 2010 letter approved the installation, surveying, and sampling of groundwater monitoring wells and piezometers (two facility bedrock wells, two off-site bedrock wells, and five piezometers on the bank of Leak Creek); additional surface water sampling at the confluence of Leak Creek and the unnamed tributary; and modeling to determine cap enhancements to reduce rainfall infiltration through the closure soil cap.

On July 23, 2010, the Solid Waste Section sent an email to Mr. Steve Curl with R.J. Reynolds regarding the status of R.J. Reynolds's approved Phase II assessment plan at the facility. On July 28, 2010, Mr. Curl responded via email stating that R.J. Reynolds is planning on moving forward with the Phase II activities and a work plan schedule will be provided to the Solid Waste Section within the next two weeks. On August 11, 2010, the Solid Waste Section received a one page schedule of the Phase II activities via email from Mr. Curl. The schedule stated that all items were pending for October 2010. On October 28, 2010, the Solid Waste Section (Ms. Jaclynne Drummond) spoke to Mr. Alan Martin with ERM NC, PC. Mr. Martin stated that Mr. Curl was no longer the contact person for the R.J. Reynolds Rural Hall Ash Landfill, and Ms. Yi Yongsheng was now the new contact person for the landfill. Mr. Martin also discussed the status of the proposed off-site bedrock groundwater monitoring well locations, and he submitted a new location map with the new alternate locations via email on the same day. On November 4, 2010, Mr. Martin and the Solid Waste Section (Ms. Jaclynne Drummond) had another telephone conversation. Mr. Martin stated that Mr. Ken Stewart was amenable to the installation of an off-site

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bedrock groundwater monitoring well on his property located east/southeast of the facility on Sixty Five Highway, Rural Hall, NC (Pin 6921-41-0091.00). Mr. Martin and the Solid Waste Section (Ms. Jaclynne Drummond) also discussed that the new alternate locations for other proposed off-site bedrock groundwater monitoring wells were too far in distance from the facility. Mr. Martin finally stated that R.J. Reynolds and ERM NC, PC would like to have a conference call to discuss the status of the Phase II assessment activities on November 8, 2010. As a result, a conference call was conducted on November 8, 2010 that consisted of the following participants: Ms. Yi Yongsheng, Mr. Max Hopkins, Mr. Alan Martin, and Mr. Tom Wilson. Several items were discussed during the conference call including the requirement to move forward with R.J. Reynold's approved Phase II assessment plan since almost a year has passed since the Phase II assessment activities were approved. In addition, a request was going to be submitted to the Solid Waste Section regarding the current status of the proposed off-site bedrock groundwater monitoring well location. On November 15, 2010, the Solid Waste Section received the request titled the *Off-Site Monitor Well Locations* letter.

The *Off-Site Monitor Well Locations* letter included the following:

1. ERM NC, PC has obtained verbal approval from Mr. Ken Stewart to install a groundwater monitoring well on the Stewart property. We plan to submit an access agreement to Mr. Stewart and tentatively are scheduled to begin drilling activities during the week of December 13th.
2. ERM NC, PC has attempted to contact Mr. Guthrie and Mr. Sprinkle by telephone multiple times to request property access for groundwater monitoring well installation. To date, we have had no response from Mr. Guthrie. Mr. Sprinkle initially considered our request to install a groundwater monitoring well on his property but then ceased returning telephone messages.
3. ERM NC, PC contacted relatives of Mrs. Margie Payne to request property access for groundwater monitoring well installation and access was denied.

Per the *Off-Site Monitor Well Locations* letter, based on the outcome of the property access efforts, it is agreed that ERM NC, PC will proceed with the installation of a groundwater monitoring well at the Ken Stewart property, and further efforts to obtain property access for installation of a second off-site groundwater monitoring well is not required at this time.

As a result, within 30 days of receipt of this letter, please install, survey, and sample the off-site bedrock groundwater monitoring well that will be located on the Ken Stewart property as described within the *Off-Site Monitor Well Locations* letter. In addition, within 60 days of receipt of this letter, please proceed with the remaining approved Phase II assessment activities including the installation, surveying, and sampling of additional groundwater monitoring wells and piezometers including two facility bedrock groundwater monitoring wells and five piezometers on the bank of Leak Creek; additional surface water sampling at the confluence of Leak Creek and the unnamed tributary; and modeling to determine cap enhancements to reduce rainfall infiltration through the closure soil cap. Within 90 days of receipt of this letter, please submit a summary report to the Solid Waste Section and please include the boring logs of all the newly installed groundwater monitoring wells and piezometers.

At least one additional off-site bedrock groundwater monitoring well that was proposed by R.J. Reynolds and approved by the Solid Waste Section on January 12, 2010 is still required in order to delineate the extent of the contaminant plume horizontally and vertically. Due to the lack of success of property access by any of the immediate adjacent property owners on the other side of Leak Creek, this additional off-site bedrock groundwater monitoring well will not be required to be installed within the above mentioned 30 and 60 day deadlines. However, please continue to diligently obtain at least one additional access agreement with at least one immediate adjacent property owner in the immediate east/northeast direction in order to install an off-site bedrock groundwater monitoring well that will provide insight into the potential migration of the contaminated groundwater from the facility onto the adjacent properties on the

other side of Leak Creek. If R.J. Reynolds is still unsuccessful in obtaining access to install the additional off-site bedrock groundwater monitoring well to delineate the contaminant plume off-site, then corrective action will be required immediately to stop the contaminated groundwater from migrating horizontally and vertically beyond the facility's compliance boundary and off-site. In addition, if the sampling results of the newly installed groundwater monitoring wells and piezometers and the additional surface water sampling results conducted during the Phase II assessment activities in conjunction with the Phase I assessment activities and the routine semiannual water quality monitoring indicate that the contaminant plume has already migrated beyond the facility's compliance boundary and/or off-site, then corrective action will be required immediately. As a result, R.J. Reynolds will then be required to select an effective remedy, and submit a Corrective Action Plan (CAP).

If you have any questions or concerns regarding this letter, please contact me at 919-508-8500 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Compliance Hydrogeologist
Solid Waste Section

cc sent via email: Mark Poindexter, Field Operations Supervisor
 Jason Watkins, Central District Supervisor
 John Patrone, Environmental Senior Specialist