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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 12, 2009

Mr. James M. Parks
Executive Director
North Texas Municipal Water District
P. O. Box 2408
Wylie, TX 75098-2408

Re: NTMWD 121 Regional Disposal Facility - Collin County
Municipal Solid Waste - Permit No. 2294
Permit Modification – Groundwater Monitoring System
Tracking No. 11995152; RN101308781 / CN601365448

Dear Mr. Parks:

We have reviewed your application for a municipal solid waste permit modification dated March 26, 2008, requesting to update the groundwater monitoring system for the referenced facility. The application was submitted by you and prepared by The Carel Corporation of Keller, Texas. The purpose of the requested changes is to address the revised groundwater monitoring and corrective action requirements in Title 30 Texas Administrative Code (30 TAC), Chapter 330, Subchapter J that became effective March 27, 2006.

Our review indicates that insufficient information has been provided to demonstrate compliance with 30 TAC Section (§)305.70. Therefore, we are unable to complete processing of your request at this time. Please review and address the following comments:

This permit modification application proposed revisions to Section 9.0 of Attachment 4, and Sections 4.0 and 6.0 of Attachment 5 in Part III of the Application - Site Development Plan. The permit modification indicated that the current groundwater monitoring system consists of thirteen (13) monitoring wells, and seven (7) have been installed and located around the perimeter of the landfills limits of waste placement. The permit modification proposed twenty (20) monitor wells by installing fourteen (14) new point of compliance (POC) monitor wells and decommissioning one (1) existing monitor well. The permit modification indicated that the spacing between POC wells will not exceed 600 feet.

1. In accordance with 30 TAC §330.57(f)(2) and §330.57(g)(3), the table of contents for Attachments 4 and 5 need to be sealed as required by the Texas Geoscience Practice Act and in accordance with 22 TAC §851.156 (relating to Geoscientist's Seals).
2. Section 9.2 in Attachment 4 and Section 4.2 in Attachment 5 stated in part:

“If physical obstacles preclude installation of the monitoring wells at proposed locations in the existing sectors, the wells will be installed at the closest practicable distance

hydraulically downgradient from the relevant point of compliance that will ensure detection of subsurface water contamination.”

Please clarify the statement, or at a minimum, revise Sections 9.2 and 4.2 to indicate that if physical obstacles preclude installation of the monitoring wells at the proposed locations, a permit modification application will be submitted for changes to the monitor well locations, but in any event, the monitor well spacing will not exceed 600 feet without an applicable site-specific technical demonstration, and the POC located no more than 500 feet from the waste management unit boundary.

3. Section 4.2 in Attachment 5 stated that the design certification for the monitoring system is provided in Appendix A. The design certification in Appendix A was prepared by Mr. Kevin T. Carel, P.G., but was not signed and sealed as required by the Texas Geoscience Practice Act and in accordance with 22 TAC §851.156. Please provide an updated, signed and sealed, groundwater monitoring design certification by a qualified groundwater scientist pursuant to §330.403(e).
4. The 121 Regional Disposal Facility, as permitted, established the POC around the entire perimeter. Currently permitted Sections 9.1 and 4.1 in Attachments 4 and 5, respectively, stated in part:

“The proposed (existing) subsurface water monitoring system consists of thirteen monitoring wells located around the perimeter of the 121 RDF. . . . Drilling activities and subsequent piezometer installation indicate that only isolated and hydraulically disconnected pockets of subsurface water are found around the perimeter, and below the bottom of the landfill excavation. . . . However, it should be noted that leachate accumulation (bathtub effect) cannot occur within the landfill due to the gravity drain design. Regardless, monitoring wells have been located around the entire perimeter to detect any lateral release. . . .” [emphasis added]

This permit modification proposes a change so that the monitor wells along the south and west boundaries (MW-4, MW-5, MW-6, and MW-7) would no longer be POC wells. The revised POC is proposed to be along the north and east boundaries from MW-8A to MW-3, consisting of sixteen (16) POC wells [14 (fourteen) new and two (2) existing]. The permit modification included Figure 4.23 in Attachment 4 and Figure 5.3 in Attachment 5 showing the proposed groundwater monitoring system. Revised Section 4.2 in Attachment 5 stated in part:

“ . . . The proposed subsurface water monitoring system has been revised in consideration of a Subsurface Water Contour Map (Figure 5.2). The map was developed by using water-level measurements in piezometers on August 3, 2000. This map indicates that subsurface water flow, should any occur, would generally follow the surface topography. Hence, potential subsurface water flow would be toward the north and east away from a topographic high located in the southwest portion of the landfill. Based on this information, the west side of the site is considered hydraulically up-gradient and the north and east sides are hydraulically down-gradient. . . .” [emphasis added]

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The permit modification contained insufficient documentation to support the proposed reduction in the POC, with only a single groundwater contour map from water-level measurements on August 3, 2000 provided. Moreover, the proposed reduction in the POC would be less protective from that currently permitted, and therefore, would not qualify for a permit modification, and represents a change to the groundwater characterization, which according to 30 TAC §305.70 would require a permit amendment.

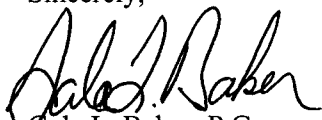
5. Please revise the permit modification to provide for a monitor well spacing not exceeding 600 feet for the monitor wells along the south and west boundaries (MW-3/MW-4, MW-4/MW-5, MW-5/MW-6, MW-6/MW-7, and MW-7/MW-8A), or provide a site-specific technical demonstration to support a spacing greater than 600 feet pursuant to 30 TAC §330.403(a)(2). A technical demonstration should address potential contaminant plume widths and may include multi-dimensional groundwater flow modeling. The technical demonstration should show that monitor wells are spaced so that plumes cannot pass monitor wells undetected.

Please revise your permit modification request and submit the revisions within 45 days from the date of this letter or your request may be considered withdrawn. In accordance with 30 TAC Chapter 330, §330.57, please ensure that each page has a header or footer that indicates the revision number and date. Your revised and/or additional pages should be in a form suitable for replacement and/or inclusion in the initial permit modification application. In accordance with 30 TAC §305.44, please include an original certification statement with the revision. Along with the original signature and date, the certification statement should indicate the name, title, and address of the responsible official.

To facilitate our review, please submit one original, two unmarked copies, and one marked copy (for example, in redline/strikeout format) of the revisions in conformance with 30 TAC §305.70(f). Please send one of the unmarked copies directly to the Texas Commission on Environmental Quality Region 4, to the attention of Mr. Sam Barrett, Waste Section Manager, 2309 Gravel Dr., Fort Worth, Texas 76118-6951. Also, please include the tracking number referenced above in the subject line of your response.

Failure to submit a satisfactory response to the items listed above may result in a recommendation to deny this modification request. If you have questions regarding this letter, please contact me at (512) 239-6730. When addressing written correspondence, please use mail code MC 124.

Sincerely,



Gale L. Baker, P.G.
Municipal Solid Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

GLB/fp

cc: Mr. Kevin T. Carel, P.G., The Carel Corporation, Keller
Mr. Joseph M. Stankiewicz, General Manager, NTMWD, Wylie
Mr. Jeff Mayfield, P.E., NTMWD, Wylie