

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

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Thru: Gary Smith, Ph.D. *gls 2/12/09*
UTA Section Manager

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Subject: August OAG Groundwater Level Elevation Report, for June and July, 2008
Log No. 2008-08-0002

Staff has reviewed the above named report, dated August 6, 2008, and received August 6, 2008, from Waste Control Specialists (WCS), and offers the following comments. The report is required by License Condition 44.

The report provides groundwater level elevations for 72 OAG monitor wells within, and in the immediate vicinity of the 1338 acre WCS facilities area for June, and 76 wells for July. Six wells had only June data and 2 different wells had only July data. The report does not include data for 19 FWF and CWF series monitor wells from June or July 2008. No additional wells were added since the last submission of OAG water level data, as plotted on a map dated May 15, 2008.

The June 2008 data was collected between June 13 and June 30, and shows 43 of the 72 were reported as dry, although water level elevations were given for 8 of these wells. WCS considers these wells dry because the water is present in a sump below the elevation of the bottom of the screened interval. The remaining 29 wells had water level elevations above the screen, and the June measurements dropped in 22 of these wells since the last measurements collected in April and May of 2008, went up in 6 wells (2 of which, TP-42 and TP-48, are near the byproduct excavation), and was unchanged in 1 well. Declines ranged from 0.01 foot to 2.09 feet, and increases ranged from 0.06 foot to 0.42 foot. Particularly noteworthy was the singular large decline of 2.09 feet in TP-31, located north of Baker Spring, for which WCS offered no explanation.

The July data was collected between July 8 and July 17, which is an improvement over the time span for the June data. From June to July, 45 wells were dry, although 4 had water level elevation data (see explanation above), 20 declined from June elevations, 6 wells showed an increase (only 1 of which, TP-42, is near the byproduct excavation), and 5 were unchanged. July declines ranged from 0.01 foot to 2.91 feet, at TP15, on the southern edge of the large playa, with no explanation offered. Increases ranged from 0.1 foot to 0.14 foot.

The text portion of their report notes that the data in Attachment 1 indicate the dry line has not significantly changed. The dry line as shown in the application did not suggest the amount of OAG water that the new drilling has exposed. These wells indicate that the area around the byproduct excavation and southeastern portion of the low level site are much wetter than previously thought. The following paragraph of the report discusses the water occurrences, referring to them as minor. Of the 10 wells mentioned, 7 have almost one foot or greater saturated thickness (see table below). Until there is a more thorough understanding of what controls the presence or absence of water in the OAG, the significance of any water should be considered more than minor, as the OAG is intended to be the drainage layer for the final cap at the byproduct facility.

Well #	Saturated thickness (July 08 data) in feet	Well location
TP-74	0.38	within the footprint of the byproduct excavation
TP-78	1.39	directly west of the byproduct excavation
TP-87	dry	north of the LSA pad
TP-88	0.92	adjacent to the byproduct excavation, south side
TP-89	dry	within low level excavation footprint
TP-90	1.04	northwest of the byproduct excavation
TP-91	dry	west of northwest corner of the LSA pad
TP-92	0.90	adjacent to the byproduct excavation, north side
FWF-27A	1.33	adjacent to west side of low level excavation footprint
FWF-1A	1.63	adjacent to southwest corner of low level excavation footprint

The Staff has two issues with the data collection and reporting. First, the data must be collected in a shorter period of time, as was done in July, to make it as comparable as possible. This data is being collected in response to a license condition, so it must become a routine monthly activity, to be scheduled in as short a period possible. Second, for eight of the wells, there is a comment that the measurement is post sampling. The TCEQ should be informed for what license condition or program the wells are being sampled, and WCS must ensure that any well sampling is performed such that the well has ample time to recover prior to the next required measurement.