September 7, 2012 **VIA Fed Ex**

Charles Maguire, Director
Radioactive Materials Division
Texas Commission on Environmental Quality
P.O. Box 13087, Mail Code – 233
Austin, Texas 78711-3087

References: (1) Radioactive Material License No. R04100, Amendment 17 CN600616890 / RN101702439.

(2) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re: "Proposed Action for Area of Concern Regarding the Detection of Water in Ogallala-Antlers-Gatuña (OAG) Wells in Compact Waste Facility (CWF) Buffer Zone, Radioactive Material License No. R04100", dated December 22, 2011.

(3) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re: "Completed Activities for Area of Concern Regarding the Detection of Water in OAG Wells in CWF Buffer Zone, Radioactive Material License No. R04100", dated February 3, 2012.

Subject: Monthly Report of Water Level Measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173.

Dear Mr. Maguire,

Waste Control Specialists LLC (WCS) is providing the results of the water level measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173 in accordance with the December 22, 2011 letter to Mr. Kelly Cook of the Texas Commission on Environmental Quality (TCEQ) (Reference 2).

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Radioactive Material License No. R04100 (Reference 1), Amendment 17, License Condition (LC) 67 states the following:

> 67. "The Licensee shall maintain an individual buffer zone for both the Compact Waste Disposal Facility and the Federal Facility Waste Disposal Facility in a lateral perimeter of at least 100 feet around all disposed waste to allow monitoring for early detection of releases and to allow for remediation, if necessary. In the event that saturated conditions are detected in the buffer zone, the Licensee shall cease all waste disposal operations and notify the executive director immediately."

The intent and context of the LC does not consider the presence of water a concern. Rather, as stated in the LC, the perimeter buffer zone around all disposed waste is intended "... to allow monitoring for early detection of releases and to allow for remediation, if necessary. ..." These potentially required activities may occur if saturated conditions migrate *from* the disposal area *to* the perimeter buffer zone.

OAG monitor wells OAG-21, OAG-22 and temporary piezometer TP-173 are located in the former small playa on the eastern boundary of the CWF within the perimeter buffer zone. Saturated conditions within the OAG were anticipated and forecast in the vicinity of the former playa due to the inherent geologic nature of playas as localized, closed depressions. The perched groundwater in this playa is a small, isolated pocket of water that is not connected to a zone of continuous saturation. Playas serve as focused recharge features both regionally and at the WCS facility. WCS notes that the existence of the small playa was identified and documented in the initial license application almost 10 years ago and documented in geologic studies since 1994. Additionally, this minor feature and its saturated condition were discussed with TCEQ staff several years before waste was accepted at the CWF on April 27, 2012.

To provide additional hydrogeologic information near the former small playa, WCS installed temporary observation wells OW-1 and OW-2 on January 4, 2012. Both wells are located east of the CWF disposal unit and west of monitor wells OAG-21 and OAG-22, and are located outside the former small playa on the eastern boundary of the CWF. These wells help demonstrate that the OAG is unsaturated in an area greater than 100 feet around the disposal areas.

Hydraulic conductivity associated with OAG-21 is sufficient to allow groundwater pumping; while OAG-22 and TP-173 do not recharge at a rate sufficient to provide effective evacuation of water. Hydrographs of water level measurements for wells OW-1, OW-2, OAG-21, OAG-22, and TP-173 are provided in Attachment A. As of August 31, 2012, about 27,900 gallons of water have been removed from OAG-21 since November 2011. For the month of August, the average height of the perched water column above the Dockum/OAG contact has been reduced to slightly more than 2.83 ft and 0.97 ft in OAG-21 and OAG-22, respectively. The OAG unit at TP-173 remains dry. OW-1 and OW-2 have been dry since

their installation in January 2012. As shown on the attached hydrograph, water levels in OW-2 continue to fluctuate but the OAG formation remains unsaturated at that location.

WCS requests that a copy of all correspondence regarding this matter be directly emailed (skirk@valhi.net) to my attention as soon as possible after issuance. If you have any questions or need additional information, please call me at 432-525-8500.

Sincerely,

J. Scott Kirk, CHP
Vice President, Licensing, Corporate Compliance and Radiation Safety Officer

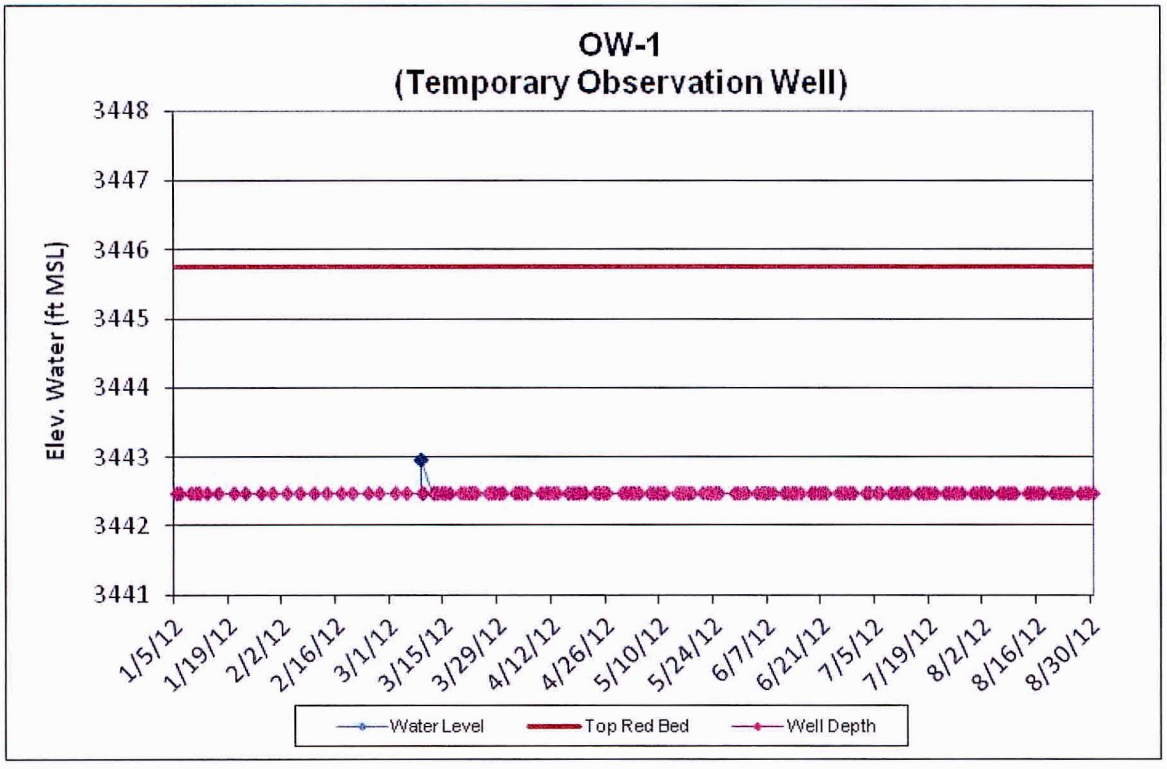
Enclosure

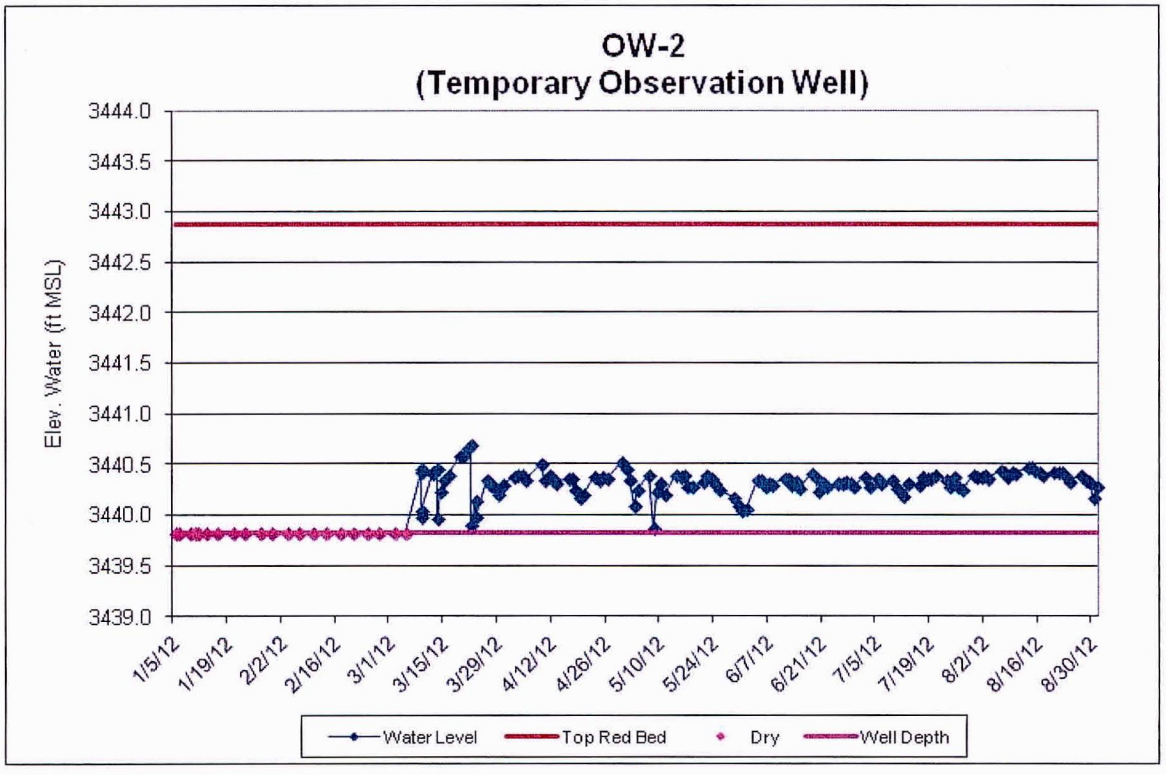
cc: Kelly Cook, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

ATTACHMENT A

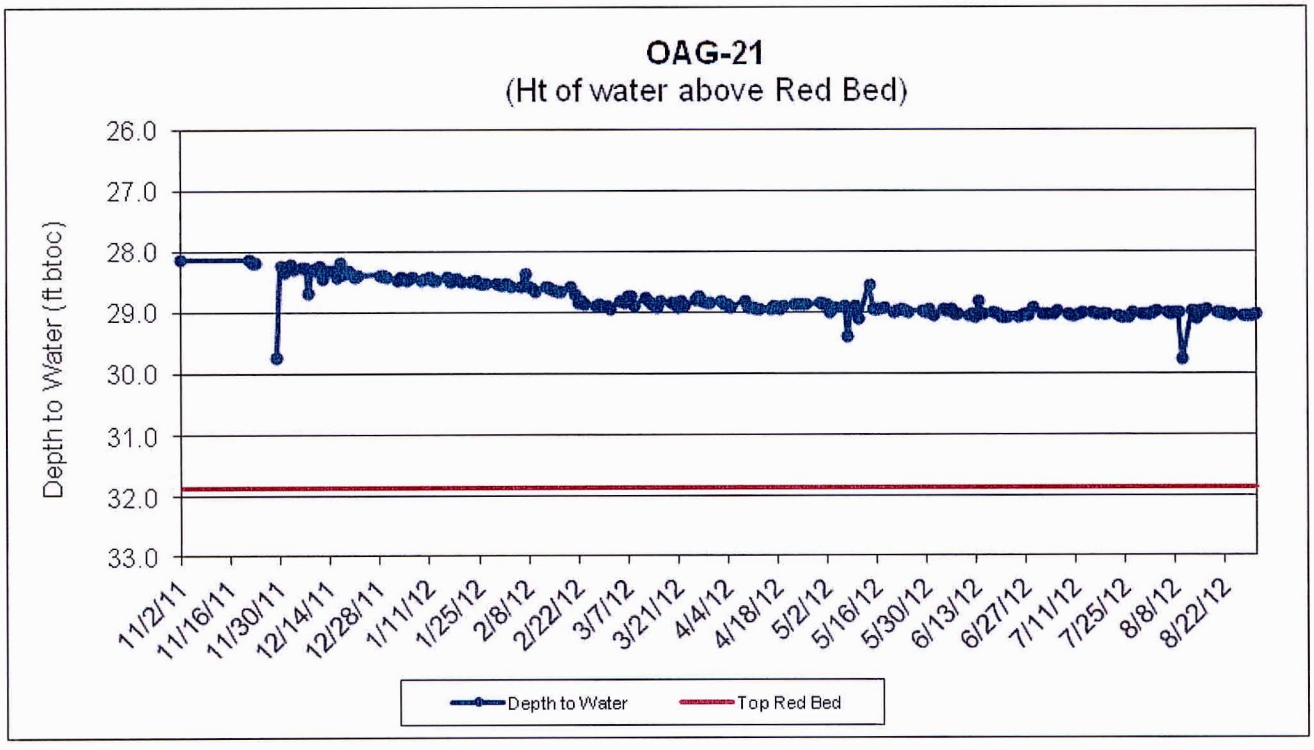
Hydrographs forOW-1, OW-2, OAG-21, OAG-22, and TP-173
through August 31, 2012

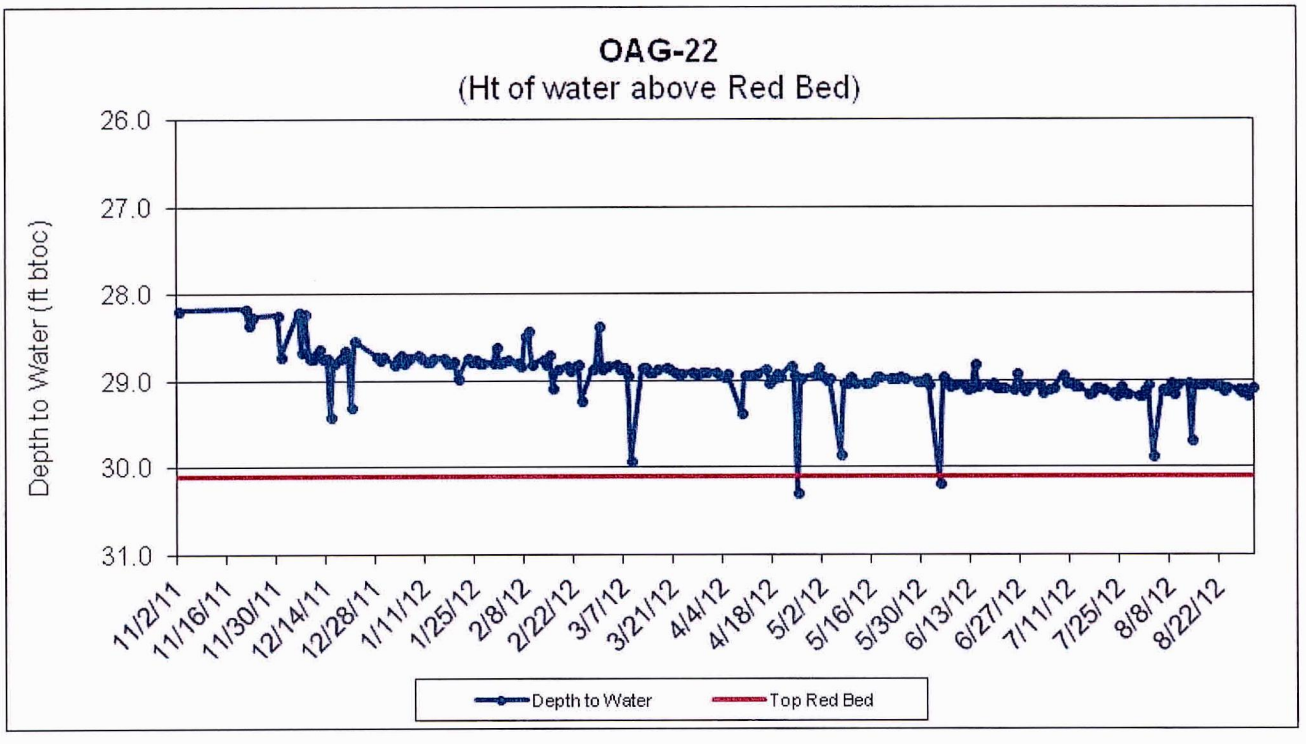
HYDROGRAPHS





HYDROGRAPHS





HYDROGRAPHS