

**WASTE CONTROL
SPECIALISTS LLC**

March 28, 2012

**VIA Express Mail
EG 728476385 US**

Mr. Kelly Cook, Director (MC-172)
Critical Infrastructure Division
Office of Compliance and Enforcement
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

References: (1) Radioactive Material License No. R04100, Amendment 12
CN600616890 / RN101702439

Subject: **Observations at OW-1 and OW-2 and Progress at OAG-21**

Dear Mr. Cook,

Mr. Rod Baltzer (President, Waste Control Specialists LLC (WCS)) asked me to provide you with recent observations from the unsaturated conditions at temporary observation wells OW-1 and OW-2. Additionally, he asked that I describe the pumping activities at perimeter monitoring well OAG-21 and make a projected estimate of the time needed to remove the remaining water from the former playa on the eastern border of the Compact Waste Facility (CWF).

OW-2

On the morning of March 9, 2012, OW-2 measured water at 28.06 ft below top of casing (btoc). Total well depth was measured at 28.65 ft btoc. Previously the temporary observation well had been dry since its installation in January 2012. The initial reading showed 0.59 ft of water in the well (end cap water).

Later that morning, the well was bailed to near dryness to observe the accumulation rate, if any. The water accumulation rate was extremely slow and not observable during a 30 minute time period.

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That afternoon, WCS began a video survey of the well. At that time, there was 0.21 ft of water in the OW-2 end cap. Video recording was temporarily suspended when the camera lens fogged up within about seven (7) ft of the surface, suggesting very humid vapor conditions in the well casing. A second attempt to video the well was accomplished by cleaning the lens and lowering the camera to the total well depth where the temperature was allowed to equilibrate and the well was video recorded from the bottom-up. Two (2) videos of OW-2 were made; the first was a record of only the screened interval, the second was the full length of the well.

The recordings showed significant condensation in the 5-foot screen interval. However, water was not observed to be flowing into the well. Condensation was present but significantly less above the screened interval although there was significant condensation on the well cap when it was removed. As noted below, OW-1 also showed significant condensation, but not to the extent or duration of that found in OW-2.

Based on the water level measurements and the elevation of the OAG/Dockum contact, hydrogeologic conditions at temporary observation well OW-2 remain unsaturated.

OW-1

OW-1 was measured as dry on the morning of March 9, 2012. Around 4:00 pm a video of OW-1 was attempted to view the difference, if any, between conditions in OW-2 and OW-1. The camera lens also fogged up in OW-1, so the process described above was repeated (including a video of the screen only and the full length of the well). At that time, OW-1 contained end cap water measuring 0.29 ft.

The following Monday, March 13, 2012, OW-1 was again dry and OW-2 contained measurable end cap water. Both wells were then video recorded again. Video recordings for both wells are available for March 9 and March 13, 2012.

Based on the water level measurements and the elevation of the OAG/Dockum contact, hydrogeologic conditions at temporary observation well OW-1 remains unsaturated.

Other Observations

A week or so before the wells were installed, clean water from testing the construction of the CWF contact water tanks was emptied by the contractor onto the ground and the water flowed south across the area where the wells were installed. It is possible that some of the discharged water migrated vertically into the OAG and is now showing up in OW-2. To further investigate potential sources, free chlorine residual (an onsite lab test) was run on the purged water from OW-2. The water contained 0.04 mg/l of free chlorine residual. Although not conclusive, free chlorine residual at this low level may suggest that part (or all) of the water source may be from the CWF tanks that contained clean water from a potable water source.

OAG-21

Water levels in OAG-21 continue to slowly decline. Between the end of November 2011 and the end of March 2012 approximately 23,250 gallons of water have been removed from OAG-21. Water levels in the previous playa have dropped about 0.78 ft in four (4) months of

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pumping. However, there is about 3.15 ft of groundwater remaining above the OAG/Dockum contact. As shown in the attached graph, the decline appears linear and, if the rate of decline remains the same, it will take around 18 months to reduce the water level to the elevation of the OAG/Dockum contact. At that point, the OAG will no longer be saturated in the vicinity of OAG-21. However, to fully evacuate the groundwater from the previous playa, an additional 18 months (at similar pumping rates and rate of groundwater decline) will be required.

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

Sincerely,



John Hultman, P.G.

Enclosure

cc: Scott Kirk, WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

OAG-21

(Ht of water above Red Bed)

