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Subject KNC-DC RCRA Field Investigation Update 053006

Hello, All,

Here is the project update for the week of May 22:

Field Investigation Update 053006

General. The access agreement for the Crane property (east and southeast of the Plant) was finalized.

The Revised RFI WorkPlan and responses to the comments received from the Agencies (letter of March 24, 2006) were submitted via electronic and hard copy to KDHE and EPA.

Field Work Completed Week of May 21 – 27, 2006. The second phase of the sonic drilling operations continued from May 20 – 24. The field team completed the remaining two wells on the Maxwell property south of the Plant, SIT-RG03 (westernmost) and SIT -RG05 (easternmost). The pads for the newly-installed wells were completed.

The first segment of the DPT investigation started on May 23: The field team completed the borings on SWMU 17 and AOC 5. They were unable to collect cores on SWMU 17 with dual tube coring due to the consistency of the subsurface material. The drilling and sampling were completed with the standard Macro Core.

At AOC 5, it was necessary, due to instability of the dike wall, to relocate AO5-SB06, -SB07 and -SB08 slightly. These were relocated from the eastern dike slope to points closer to the base of the dike. They were then directionally drilled into the native soil below the dike.

Heavy rain prevented or delayed access to some of the sites that were intended to be completed during this phase of the work. At SWMU 19, the field team was able to delineate the boundaries of the buried lime trenches. The field team completed 10 borings. Due to the actual boundaries of the landfill, it was necessary to relocate all of the borings slightly. Also at SWMU 19, as was the case at SWMU 17, the consistency of the material did not allow dual tube coring and sampling, and Macro Core sampling had to be used. The field team completed two borings in the open trench of SWMU 19.

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At SWMU 8, nine of 13 borings have been cleared for underground utilities; the field team completed two of these (S08-SB07 and S08-SB08). Four borings cannot be safely cleared, even with relocation, as vertical borings. See recommendations.

At AOC 1, the field team coordinated closely with KNC Maintenance to get safe locations cleared. However, it is unlikely that nine of the planned borings can be cleared.

Activities Planned for Week of May 28 through June 3: The sonic drilling contractor will return on May 31 for the final phase of the work. This will include completion of the well on the Crane property (SIT-RG06) well and development of the wells they have installed. If time permits, additional borings will be completed to provide further lithologic information.

The DPT contractor will also return on May 31, and will continue working at SWMU 8. As the schedule allows, the field team will complete the sampling program at SWMUs 7, 10 and 11, and at AOCs 1 and 4. This schedule will be dependent on the impact of wet weather on SWMUS 10 and 11, where muddy conditions can make access unsafe. See recommendations.

Since the geophysical survey did not resolve the exact boundaries of SWMU 7 (general landfill), the field team may use a backhoe or trenching to attempt more definitive locations for the four borings scheduled there.

A former long-term employee and resident of the area has assisted the field team in better defining the location of the gas shed (AOC 4) that existed on the former farm property on which Farmland constructed the Plant. Based on this input, the field team will mark and attempt to clear sample points at that site. However, AOC 4 cannot be sampled until the current turnaround activities there are completed. It is anticipated that another mobilization of the DPT contractor will be required to complete all of the borings.

The field team also plans to sample the newly-installed wells during the coming week

At the request of Mr. Everett Spellman of KDHE, the project team will complete a tentative optimization program, for which a formal request for a temporary authorization will be submitted under 40 CFR 270.42(e).

Findings: Lithology on the sonic borings drilled this week did not vary appreciably from those completed previously.

At SWMU 19, in the more northerly boring completed in the open trench, the field team found asphalt, resin, and catalyst, as documented in the previous owner's disposal records for the area. The depth of the lime and landfill material varied up to

approximately 20 feet.

Recommendations: Interferences from surface and subsurface utilities and structures, and the effects of recent heavy rains, continue to impact safe sampling at several SWMUs and AOCs. For some of these locations, rather than limit the number of borings that can be completed safely, KNC recommends alternative sampling methods that will provide data to evaluate the potential contribution of these units to groundwater contamination. Examples are:

- At SWMU 8, it may be possible to complete S08-SB01 and S08-SB02 by directional DPT drilling, to obtain samples directly under the influent box while avoiding subsurface utilities.
- At SWMUs 10 and 11, it may be possible to combine directional DPT drilling and hand augering to obtain deep and shallow samples. The deeper samples could be obtained safely by stationing the drilling rig outside the landfill. Shallower samples could be obtained safely by hand augering.

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