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DOCUMENT REVIEW FORM

SITE NAME: Flint Hills Resources – North Terminal
New Hanover Co.

DOCUMENT: Remediation Update Report for August 5, 2004 to February 25, 2005

RECEIVED: 06/17/05

CONSULTANT: Catlin Engineers and Scientists

REVIEWED BY: Sam Watson on 07/01/05

COMMENTS:

Report presents summary of activities conducted between August 5, 2004 and February 25, 2005 for the Para-Xylene (PX) Area and the Loading Rack Area (LRA).

PX AREA:

Review of the data indicates PX concentrations generally increased across the site during the reporting period. The report attributes these increases to the release of contaminants from the smear zone soils. This may not be an unreasonable assumption given that the chemical oxidation applications in the trenches (and the water used to “push” the hydrogen peroxide out through the aquifer) may have flushed PX from the smear zone.

Given the aggressive remediation activities that are planned for the site, additional remediation requests from DWQ are not needed at this time. Recommend continued remediation in accordance with plan presented in the June 2005 Revised Plan of Action.

LRA:

Review of the LRA data indicates that contaminant concentrations in this area are generally unchanged. There are some increases in contaminant concentrations in the area of KMW-13 which are reasonable given its downgradient location from the source area. Increases in KMW-3 are significant but can be attributed to the free product found in nearby well AMW-4. The free product observed in AMW-4 increased from 0.8 feet in August 2004 to 2.10 feet in February 2005. Assessment of the source of the product in AMW-4 is being conducted by APEX at this time. No additional assessment requirements should be required from FHR at this time.

Benzene concentrations in AMW-6 (downgradient well) decreased from 210 ppb to 82 ppb. The benzene in this well suggests an upgradient source much closer than the known source area located in the area of KMW-8 (East of River Road). The benzene may be attributable to the product found in AMW-4. Hopefully, Apex’s assessment will provide data that will help show where the benzene is coming from.

Xylene concentrations in AMW-6 increased from 20 ppb to 240 ppb. Although the concentration is still well below 2L, the increase is significant and should be watched closely in the future.

I think it should be noted that there is little well control west of the line delineated by wells KMW-3, AMW-4, AMW-3, and AMW-1. It may be necessary in the future to require additional wells west of this line to obtain chemistry data and better define and refine the groundwater flow characteristics in this area. However, the responsibility for this additional assessment may not lie with FHR. Review of the Apex assessment should provide additional data that will help in determining who will be responsible for any further assessments.

RECOMMENDATIONS:

I recommend continued monitoring for both the PX Area and the LRA at this time along with the proposed remedial actions proposed in the Revised Plan of Action.