Pennsylvania Department of Environmental Protection

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Southeast Regional Office

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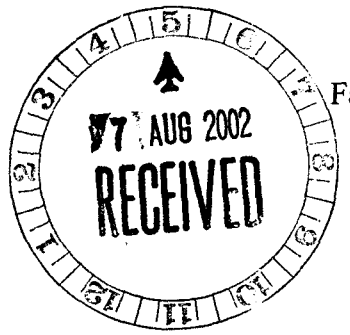

Mr. Winston Crow
Project Manager
Air National Guard/CEVR
3500 Fetchet Avenue
Andrews Air Force Base, MD 20762-5157

Re: ECP – Storage Tanks
111th Fighter Wing – Air National Guard
LRP ID No. 1-46-931-27535
Motor Pool Area
NASJRB Willow Grove
Horsham Township
Montgomery County

Dear Mr. Crow:

The Pennsylvania Department of Environmental Protection (Department) has received and reviewed the June 2002 document titled "Draft Completion Report for Interim Removal Action Operations at the Motor Pool Area" (Draft RACR). The report was prepared for the Motor Pool Area at NASJRB Willow Grove by PEER Consultants, P.C. (PEER) on behalf of the Air National Guard's 111th Fighter Wing and was received by the Department on July 12, 2002. The following comments are based on information presented in the most recent submittal and other data available in the Regional Case File.

During the most recent groundwater sampling event, no detectable free product was noted in monitoring wells MW-2 and MW-3, both located immediately downgradient of the former underground storage tanks. Historically, these wells have been impacted by free product associated with a 1,000-gallon diesel fuel release that occurred in 1990. Despite the volume of the release, groundwater monitoring has shown impacts to be minimal. The quantity of free product in MW-2 and MW-3 during the most recent rounds of groundwater sampling dating back to February 1999 has varied from a measurable thickness of 0.01 feet to non-detect. Groundwater analysis has continued in the wells intermittently impacted with free product and the results support PEER's interpretation that the petroleum is weathered and perhaps depleted with respect to the volatile fraction, which is the fraction of concern from a human health and environmental risk standpoint. Based on the data presented, the Department recommends that at least one more round of groundwater sampling be conducted at monitoring wells MW-2 and MW-3, which may be utilized as the point of compliance wells for attainment demonstration purposes. Justification for recommending these wells as points of compliance is discussed in the following paragraph.

A potentiometric surface map was presented as Figure 2.2 in the Draft RACR. The potentiometric surface map was prepared using the average hydraulic head at each monitoring well calculated from measurements collected over eight quarters of groundwater level gauging conducted between February 2, 1999 and May 8, 2002. PEER has surmised that a delineated bedrock trough feature underlying the Motor Pool Area is a hydrogeologic control influencing hydraulic head and thereby affecting the observed hydraulic gradient. PEER believes that the existence of the bedrock trough calls into question the reliability of the apparent groundwater flow direction downgradient of MW-2 and MW-3. Because of this, the Department questions the reliability of selecting MW-4 and MW-5 as point of compliance wells. In the absence of monitoring wells in a known downgradient direction from MW-2 and MW-3, it is recommended that attainment be demonstrated at MW-2 and MW-3. Under the Statewide Health Standard for groundwater, a statistical demonstration of attainment as described in Section 250.707 of the Pennsylvania Code is acceptable. If the statistical test fails for any of the constituents of concern, remediation or establishment of site-specific standards are acceptable alternatives for realizing site closure.

Given the concentrations of regulated compounds observed in groundwater, the absence of nearby groundwater receptors, and the apparent composition and quantity of the free product (i.e., weathered diesel fuel not suspected to be comprised of a significant volatile fraction) intermittently observed on the water table at the recommended point of compliance wells, the Department believes that establishment of site-specific standards, if necessary, could be easily accomplished utilizing a conservative fate and transport model to predict the extent of impacts downgradient of MW-2 and MW-3. Potential exposure pathways could be evaluated using the results of the predictive model.

If you have any questions in regard to this matter, please contact me at 610-832-5940.

Sincerely,

M. Seth Pelepko
Geologic Specialist
Environmental Cleanup

James R. Burke, P.G.
Licensed Professional Geologist
Environmental Cleanup

cc: Mr. Stanley- PEER Consultants, P.C.
Mr. Burke
Mr. Day-Lewis
Mr. Sinding
Mr. Pelepko
Re 30 (AR02)212-18