



DEPARTMENT OF THE AIR FORCE
AIR NATIONAL GUARD

06 AUG 02

ANG/CEVR
3500 Fetchet Avenue
Andrews AFB, MD 20762-5157

Ms. Cheryl Brewer
PEER Consultants, P.C.
78 Mitchell Road
Oak Ridge, TN 37830-7953

Dear Ms. Brewer

Attached are our comments for incorporation into the final Completion Report for the Interim Remedial Action Operations at Site 1, Willow Grove Air Reserve Station. Request you respond to the comments within two weeks of receipt of this letter. Upon ANG/CEVR approval, please forward the revised final report to all parties as soon as possible.

Point of contact for this action is the undersigned at (301) 83643155 or email winston.crow@ang.af.mil.

Sincerely

A handwritten signature in black ink that reads "Winston K. Crow".

WINSTON K. CROW, R.E.M.
Program Manager
Environmental Restoration Branch

Attachments:

1. PADEP Letter dated 31 July 2002
2. ANG/CEVR Comments dated 15 July 2002

07/01/02 11:43 FAX 010 832 6143 DEF WASTE MGT. ECP 0002
Jose - KTI
Jose
Winston
7-31-02

Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428
July 31, 2002

Southeast Regional Office

610-832-5940
Fax 610-832-6143

Mr. Winston Crow
Project Manager
Air National Guard/CEVR
3500 Fetchet Avenue
Andrews Air Force Base, MD 20762-5 157

Re: ECP -- Storage Tanks
11 1th Fighter Wing -- Air National Guard
LRP I.D. No. 1-46-93 1-27535
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 11 1th 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

Mr. Winston crow

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July 31, 2002

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,

Sincerely,

M. Seth Pelepko
Geologic Specialist
Environmental Cleanup Program

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

cc: Mr. Stanley, PEER Consultants, P.C.
Mr. Burke

Mr. Winston Crow

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Mr. Day-Lewis
Mr. Siding
Mr. Pelepko

Technical Review

To: Winston Crow

From: José Hurtado

State: Pennsylvania

Date: 07/15/02

Base: Willow Grove Air Reserve Station
Willow Grove, Pennsylvania

Title: Draft Completion Report for Interim Removal Action Operations at the Motor Pool Area – **Comments**

No.	Page No.	Comment
1	2-2	Figure 2: Please add a legend to identify/depict the buildings.
2	2-3	Line 13: The groundwater monitoring report (PEER, June 2002) indicates that the groundwater flow trend is to the north. Table 2.2 of this report includes the groundwater elevations for the 05 May 02 activities; please use the latest measurements obtained to determine the groundwater flow.
3	2-4	Table 2.1: Please verify if MW-04 and MW-05 were samples during the 8 th Round.
4	2-5	Table 2.2: Please format headings for Round 2 & 3.
5	2-7	Figure 2.2: The values for the groundwater elevations for each of the wells do not appear on Table 2.2; please use the most recent readings taken at the site. Please see comment #1.
6	3-1	Line 11: Was there any significant free product extracted?
7	3-2	Line 12: It is indicated that previous results were taken into consideration to recommend the IDW disposal. Were the current results for the TCLP parameters considered for this recommendation? Please include the results of the TCLP analysis.
8	3-2	Line 15: Please indicate the procedure(s) used in disposing of the absorbent socks.
9	5-1	Line 1: Please indicate/reference under what accordance has attainment been shown.
10	5-1	Line 2: Has free phase product been measured or observed? Please clarify.

- 11 5-1 Line 5: Please indicate for how long in monitoring going to continue and how many rounds are required or expected for closure. Please include any recommendations (i.e., closure).
- 12 6-1 Line 14: Is this the Pennsylvania Code 25 referenced earlier in the report? If not, then include proper referenced document.

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WINSTON K. CROW, R.E.M.
Program Manager
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STAFF COORDINATION _____ LAST EDIT 8/2/02

File Name: Comments on Draft Completion Report.doc

CJ 8/2/02

WKC, 08/05/02

WKC 8/6/02