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16 December 2003

Mr. Seth Pelepko
Pennsylvania Department of Environmental Protection (PADEP)
Southeast Regional Office
Lee Park Suite 6010
555 North Lane
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Subject: Response to PADEP Comments on
Draft IR Site 10 Soil Letter Report to Support No Further Investigation at this Time, NASJRB, Willow Grove, PA

Dear Mr. Pelepko:

On 16 December 2003, EA and PADEP discussed the PADEP comments on the "Draft IR Site 10 Soil Letter Report to Support No Further Investigation at this Time". This letter is a response letter to the PADEP comments incorporating the conference call discussions.

Below you will find each PADEP comment followed by a comment response.

PADEP Comment

(1) On Page 1, Paragraph 2, "The objective of this letter is to demonstrate..." The data presented in the letter demonstrate that IR Site 10 soil in the general areas accessible for characterization is in compliance with the Department's current calculated Medium Specific Concentrations (MSC) for the regulated substances investigated. It does not document that all IR Site 10 soil is in compliance with the MSCs for all substances known or expected to have been released at the site nor does it document that all IR Site 10 soil occupying known or suspected areas of concern (AOC) is in compliance with the MSCs.

Comment Response

This referenced paragraph will be reworded to incorporate the above suggestions.

PADEP Comment

(2) On Page 1, Paragraph 3, "Note below that soil samples collected in 1997..." The idea that soil samples collected in 1997 and 2003 did not characterize all known AOCs (i.e., potential Act 2 remediation "sites") should somehow be included in the report. This was due to the presence of existing storage tanks and associated piping, which, according to the Navy, placed some constraints on access, thereby making completion of an attainment demonstration for each AOC, the process required under a typical Act 2 remediation, infeasible at this time. It is important to couple this information with the idea that historical and current groundwater and soil data suggest that if areas of soil impact above Act 2 standards do remain at IR Site 10, they are seemingly relatively limited in extent and, therefore, not likely representative of unacceptable exposures in consideration of current property uses (i.e., there are no occupied enclosed spaces in the immediate vicinity of the known jet fuel release area and large portions of IR Site 10 are capped with asphalt paving material). Please include groundwater data tables from 1993, 1997, and the most recent sampling event(s) to support the assertion that any potential remaining areas of soil impact are limited. Finally, it is expected that NASJRB Willow Grove will remain an active military installation in the foreseeable future, supporting the premise that complete Act 2 demonstrations of attainment for each AOC may be more appropriate at the time of a property transaction or significant change in land use at the IR Site 10 portion of the base. This information provides the basis for a "no further investigation at this time" decision for IR Site 10 soil.

Comment Response

The referenced paragraph will be reworded to incorporate the above suggestions. In addition, this portion of the letter will include a more detailed discussion of the reason the path "no further investigation at this time" was pursued along with the current use of the site. During the conference call there was discussion of PADEP's request to include groundwater data from 1993, 1997, and recent data. EA mentioned that previously PADEP had requested that only soil analytical results be included in this letter report. PADEP responded that they had thought they would receive both the IR Site 10 Soil Letter Report and IR Site 10 Ground-water Petition Report at the same time. Therefore, PADEP could refer to the groundwater information included in the IR Site 10 Ground-water Petition Report while reviewing the IR Site 10 Soil Letter Report. Since the IR Site 10 Ground-water Petition Report has been delayed pending collection of a second round of samples, the 1993, 1997, and recent data will be included in the revision of the report. In addition, PADEP agreed that at this time the recent groundwater data from the May and June 2003 sampling event will be sufficient for the revision of the IR Site 10 Soil Letter Report based on time constraints.

PADEP Comment

(3) On Page 4, Paragraph 4, "Based on 1997 and 2003..." According to 1997 and 2003 groundwater and soil analytical data, there is no evidence that significant volumes of soil at IR Site 10 exceed the Department standards. If the data in the report were sufficient to suggest that all IR Site 10 soil at all AOCs was in compliance with the Act 2 MSCs, the Department would be able to entertain an Act 2 demonstration of attainment as opposed to a "no further investigation at this time" decision.

Comment Response
This conclusion paragraph will be reworded to include more detail as stated in the PADEP comment.

PADEP Comment
(4) Under Act 2, the surface soil sample interval is considered the 0-2 foot depth interval. This comment necessitates revisions to Tables 1, 3, 5, 7, and 9. For samples collected over depth intervals that extend from the surface to below 2 feet, it was correct to assume that the most conservative standard (i.e., lowest) should be applied when comparing the 0-2 foot direct contact and soil-to-groundwater MSCs.

Comment Response
Revisions will be made to the above mentioned tables. The samples with intervals from 0 to 5 ft will remain in the surface soil tables. However, the samples from locations with beginning depths of 2 ft or more will be transferred to the subsurface soil tables.

PADEP Comment
(5) In Tables 1, 2, 9, and 10, the MSC for 1,2-dibromoethane (EDB) is lower than the method detection limit. The Practical Quantitation Limit (PQL) is also lower than the method detection limit and equal to the MSC (refer to Table IV-10 in Section IV of the TGM). This compound has not been characterized using the appropriate level of sensitivity. Since EDB is a potential contaminant of concern (i.e., it is included on the shortlist for jet fuel), groundwater data should be used to support the idea that it is not likely present in substantial amounts in IR Site 10 soil.

Comment Response
The lab was contacted about the method detection limit for EDB. The lab stated that based on the samples received a percent solid correction had to be completed to analyze the samples. Since EDB is a potential contaminant of concern, groundwater data will be utilized to support the conclusion that it is not likely present in substantial amounts in IR Site 10 soil.

PADEP Comment
(6) In Tables 1, 2, 9, and 10, the reported MSC for chloromethane is incorrect. It should be 0.3 mg/kg, not 0.00029 mg/kg (refer to 25 Pa. Code Chapter 250, Table 3).

Comment Response
The MSC for chloromethane will be changed to 0.3 mg/kg in the above mentioned tables.

PADEP Comment
(7) In Table 2, the MSC for 1,1,2,2-tetrachloroethane is lower than the method detection limit for the sample collected at NFFW-SB-6. The PQL is also lower than the method detection limit and the MSC at this location (refer to Table IV-10 in Section IV of the TGM).

Comment Response
PADEP and EA have agreed that 1,1,2,2-tetrachloroethane is not a compound related to the releases which occurred on site. Therefore, no changes need to occur within the report. Note

that this comment is related to the 1997 analytical results and not the recent sampling results. In addition, the recent soil results for 1,1,2,2-tetrachloroethane on Tables 9 and 10 show that the method detection limit is below the applicable MSC and that the compound results do not exceed the method detection limit or the applicable MSC.

PADEP Comment

(8) In Table 2, the MSC for 1,2-dibromo-3-chloropropane is lower than the method detection limit for the sample collected at NFFW-SB-6. The PQL is also lower than the method detection limit and the MSC at this location (refer to Table IV-10 in Section IV of the TGM).

Comment Response

PADEP and EA agreed that 1,2-dibromo-3-chloropropane is not a compound related to the releases which occurred on site. Therefore, no changes need to occur within the report. Note that this comment is related to the 1997 analytical results and not the recent sampling results. 1,2-dibromo-3-chloropropane was not included in the analysis of the recent soil samples.

PADEP Comment

(9) In Tables 5 and 6, the applicable MSC for chromium is the MSC for hexavalent chromium. This is the presumption unless geochemical speciation is completed.

Comment Response

The lab was contacted to determine if the "total chromium" reported is hexavalent chromium. The lab stated that the "total chromium" reported is a combination of Chromium III and IV. However, upon discussion with PADEP, the standard is to use the MSC for Chromium IV when a combination of Chromium III and IV is listed as the analyte. Therefore, Tables 5 and 6 will be updated to only include the calculated MSC for Chromium IV.

PADEP Comment

(10)In Tables 7 and 8, the limit related to the PQL was achieved for bis(2-chloroethyl)ether, n-nitroso-di-n-proylamine, 2-nitroaniline, and 3-nitroaniline, even though the MSCs are lower than the method detection limits (see Table IV-10 in Section IV of the TGM). Comparison of analytical results to the PQL as a means for demonstrating that levels in soil are acceptable under the Statewide Health Standard is suitable for these compounds.

Comment Response

EA and PADEP agreed that no changes need to be made to the report in reference to this comment based on the fact that these compounds are not associated to the releases that occurred on the site. In addition, the above compound results from Tables 7 and 8 are below the applicable PQLs.

PADEP Comment

(11) For 4-nitroaniline in Tables 7 and 8, 25 Pa. Code Section 250.4 may be used to derive the limit related to the PQL, since no EQL has apparently been established by the EPA and the MSC is lower than the method detection limit. Comparison of analytical results to the limit related to the PQL as a means for demonstrating that levels in soil are acceptable under the Statewide Health Standard is suitable for this compound.

Comment Response
EA and PADEP agreed that no changes need to be made to the report in reference to this comment based on the fact that these compounds listed are not associated to the releases that occurred on the site. In addition, the 4-nitroaniline results from Tables 7 and 8 are below the applicable PQL.

We appreciate the opportunity to discuss these comments with you. As we discussed, we anticipate having the revised report to you on or before December 24. If you have any questions or comments please do not hesitate to call me at 302 325-3560.

Sincerely,

Maria Magilton

Maria I. Magilton
Project Scientist

EA Project No.: 29600.74 6200

cc: J. Dale, EFA Northeast
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