COMMENTS ON THE DRAFT FINAL VAPOR INTRUSION INVESTIGATION REPORT
Fort Monmouth Army Base and Charles Wood Area, Fort Monmouth, New Jersey
Dated August 2012

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Item	Ref		
1	**Section 4.1**	As discussed during our conference call in November, although it is understood Building 675 is beyond the 100' radius trigger for performance of a vapor intrusion investigation, additional information regarding this as well as Buildings 676 and 677 is necessary. During the "kickoff meeting", it was determined the building was to be assessed at the time of sampling, and recommendations made at that time with respect to sampling. Sections 3.2 and 3.3 of the submittal specify that Buildings 675, 676 and 677 were inspected and evaluated for inclusion in the vapor intrusion sampling program, and report text in Section 3.3 states the results of the inspection are provided in Section 4.1. Other than a brief mention (with no recommendation) in the field logbook notes, a review of the document, however, did not locate the discussion in the remaining sections of the report. Please submit same.	The following sub-section will be added to Section 4.1: ***Buildings 675, 676 and 677*** *Buildings 675, 676 and 677 are located in the western portion of the MP, just northwest of Building 602 (see Figure 2). Although none of the three buildings lie within the 100-foot radius trigger for performance of a VI investigation, it was decided during the kickoff meeting that additional information was necessary due to their proximity to the trigger well for Building 602. As a result, the buildings were visited during the site inspection. Building 675 is a small, above-grade building with air space beneath the floor (similar to a trailer), Building 676 is a two-story building with slab-on-grade construction, and Building 677 is a one-story building with slab-on-grade construction and office space. Buildings 675 and 676 could not be accessed during the site inspection. No VI samples were collected inside the buildings.* The following sub-section will be added to Section 5.2: ***Buildings 675, 676 and 677*** *Because Buildings 675, 676 and 677 do not lie within the 100-foot radius trigger for performance of a VI investigation, no VI samples were collected. Instead, the VI pathway at Buildings 675, 676 and 675 was assessed through data generated at Building 602, which is located adjacent to the three buildings and within the 100-foot trigger radius. Because the VI pathway at Building 602 is considered incomplete, the pathway at Buildings 675, 676 and 675 is also considered incomplete. Additionally, the above-grade construction of Building 675,*

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			which lines downgradient of the trigger well, eliminates potential risk related to the VI pathway. The following sentence was added at the end of the 3rd bullet of Section 6: *Based on this conclusion, the VI pathway at Buildings 675, 676 and 677 (located adjacent to Building 602) is also considered incomplete and no further action is recommended.* Also, the field logbook notes will be updated to include pages 4 and 5, which reference the site inspection at Buildings 675, 676 and 677.
2	**Section 5.2**	In Section 5.2, page 5-2, the Army posits the chloromethane detected in the samples are from background and unrelated to Site activities. The chloromethane ambient, indoor air, and sub-slab data as presented in the report were reviewed. Chloromethane is not detected in the sub-slab samples. At buildings where chloromethane is detected in the indoor air, the ambient samples likewise have detections of chloromethane. The detected concentrations in the indoor air and ambient samples are all 1 ug/m3. The absence of chloromethane detections in the sub-slab samples confirm the vapor intrusion pathway is incomplete, and coupled with the indoor air and ambient results support the Army's hypothesis.	Comment noted.
3	**Section 6**	*Buildings 283 & 602.* It is agreed the VI pathway is incomplete at existing Buildings 283 and 602; no additional action regarding VI is necessary.	Comment noted.
4	**Section 6**	*Building 699.* Section 6 states that the VI pathway is incomplete at this time, but that "VI at this location should be considered when the remedy for Building 700 is being evaluated, and that additional sampling is recommended after the completion of the Building 700 remedy, if necessary". Groundwater has been and remains a potential source for the PCE and TCE present in the sub-slab soil gas. While it is agreed the VI pathway is not presently complete as indoor air results did not detect PCE or TCE, the sub-slab results for PCE are elevated, up to approximately ten times the soil gas screening level. Although this degree of exceedence was not identified or discussed in the submittal, it does trigger the Long	Comment noted.

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		Term Monitoring (Table 6.3) Mitigation Decision Matrix in the Department's Vapor Intrusion Technical Guidance (Version 2, January 2012), Table 6.3, which indicates semi-annual inspection of the building, with annual sampling of indoor air, is appropriate. It is agreed additional sampling following future remedial activities (relating to Building 700) in this area is appropriate.	
5	**Section 6**	*Building 700.* Section 6 states there will be an RI/FS for the PCE spill, the potential for VI should be considered during the Feasibility Study, and "if necessary, after the Building 700 remedy is implemented, additional VI sampling is recommended". The vapor intrusion assessment detected PCE in the sub-slab soil gas at a concentration below the screening level, PCE was not detected in the indoor air. The pathway is therefore currently incomplete. It is agreed, however, VI should be considered during the FS. As indicated, additional VI sampling may also be necessary following the remedy for Building 700.	Comment noted.
6	**Section 6**	*Building 1001.* It is agreed the VI pathway at existing Building 1001 is incomplete; no additional action regarding VI is necessary.	Comment noted.
7	**Section 6**	*Building 2700.* Although historic ground water analytical data indicates a potential source for VI in the building, sampling indicates the VI pathway for the existing Building 2700 is incomplete. No additional action regarding VI is necessary.	Comment noted.
8	**Section 6**	*Future Use/Redevelopment and VI.* Until such time as all VI contaminants of concern within the ground water have met criteria, as indicated in the submittal, plans for redevelopment must be mindful of same. It is agreed "engineering controls should be designed as part of any redevelopment effort to match up the future land use with the potential threat to current and planned buildings .... " As indicated in the VIG, this can be accomplished by incorporating the presumptive remedy into the design of the building(s) or conducting a VI investigation at the time of redevelopment.	Comment noted.
9	**Section 6**	*Miscellaneous.* The summary tables list incorrect DEP screening levels for the compound 1,2-dichloroethane. The correct soil gas screening level for residential and non-residential is 20 u~/m3, and the correct indoor air screening level for residential and non-residential is 2 ug/m .	The DEP screening levels for 1,2-dichloroethane will be corrrected.