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PITT-05-1-063

May 17, 2001

Project Number 6966

Mr. David Douglas
Minnesota Pollution Control Agency
Site Response Section
Groundwater and Solid Waste Division
520 Lafayette Road
St Paul, Minnesota 55155

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order No. 0003

Subject: Remedial Investigation for Operable Unit 3
NIROP Fridley, Fridley, Minnesota

Dear Dave:

Please see the Navy responses to OU-2 Risk Assessment comments from MPCA. These comments were received April 10, via e-mail. The attached responses are identical to those distributed by e-mail on May 10, and as stated in that e-mail, are consistent with the discussion from the April 25 partnering team meeting.

Further, per our weekly conference call on May 17, I believe we determined that the next course of action is as follows:

- MPCA to check these RA responses to comments, and December 28, 2000 RI responses to comments for acceptability.
- EPA to compile revised OU-2 RA (provided on April 20) with this letter and the December 28 letter, to provide chapter 7 language facilitating direct move from the completed RI to the Proposed Plan.
- Tetra Tech to compile responses to comments (this note and December 28 note) and EPA's chapter 7 into the final RI for OU-2/OU-3, and reissue the document.

Please let me know if this is not as we previously agreed.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Sladic'.

Mark Sladic, P.E.
Task Order Manager

cc: Joel Sanders, SOUTHDIV /
John Aubert, NAVSEA
Tom Bloom, EPA
Bob Jupin, TtNUS
Mark Perry/File 6966, TtNUS
Debra Wroblewski, TtNUS (Cover Letter Only)

RESPONSE TO COMMENTS ON MARCH 26TH DRAFT HUMAN HEALTH RISK ASSESSMENT FOR OU2

1. Comment: Page 2, Section 2.3 Screening Risk Evaluation.

Suggest adding statement after first sentence which clearly states the objective of the screening assessment (e.g., The objective of the screening assessment is to identify COCs and areas of concern which warrant a more in depth evaluation).

Response: The Navy agrees to add the statement suggested by MPCA.

2. Comment: Page 3, mention of Appendix B.

Suggest that a summary table be added to Appendix B. The summary table should be similar to those suggested in the previous comments and Tables 2-17 and 2-18. The table should include a footnote clearly stating that the table presents the results of the screening assessment and that the results are utilized in a qualitative way to identify COC and areas for further evaluation only (i.e., the results do not represent actual risk estimates).

Response: The Navy agrees to add a summary table to Appendix B.

3. Comment: Page 3, 2nd paragraph, last sentence: "Since the future site use is expected to remain industrial, residential receptors"

Modify to read: "Since the future site use is expected to remain be limited to industrial, residential receptors"

Response: The Navy agrees to modify the paragraph per MPCA's suggestion.

4. Comment: Page 3, Section 2.4 Refined Risk Evaluation. Please note that the HI target risk level for the chronic receptors (industrial and minor frequent construction worker) is 1, not 1.0. The HQ and HI target risk level for the Major Infrequent Construction worker is also 1, not 1.0. Please correct all text and tables.

Response: The Navy agrees to revise the text and tables per MPCA's suggestion.

5. Comment: Page 4: Paragraph 1 under Typical Industrial Worker mentions location AB032 and Paragraph 1 under Minor Frequent Construction Worker mentions location AB032A. Is the same sample location being referred to? Please use a consistent sample identification scheme.

Response: The Navy agrees to check consistency of the sample identification scheme.

6. Comment: Page 5: 1st complete sentence: location EB0042A. This sample location is not on the Figure. Should the sample location be EB004A? All sampling locations should be noted on the Figure.

Response: The sample location is EB004A.

7. Comment: Page 5. 1st Full paragraph, 4th sentence. . . . carcinogenic PAHs at boring AB043A (1 to 3 feet bgs) should this be (8 - 10 feet bgs)?

Response: The sample interval is (8 - 10 feet bgs). The correct sample location is AB043D (8 - 10 feet bgs).

8. Comment: Page 5 Major Infrequent Construction Workers.

The major contributors to risk comprise not only the chemicals with individual HQs and ICRs exceeding the target risk levels but mixtures of chemicals whose cumulative endpoint HIs and ICRs exceed the target risk levels. All of the COCs identified in Table 2-18 should be included in the text and in Table 2-19. For example, while toluene's individual HQ does not exceed the target HQ of 1 it significantly contributes to the cumulative HI for the nervous system and therefore should be listed. Table 2-19 likewise should include the locations for manganese and toluene.

Response: The Navy agrees to revise the tables per MPCA's suggestion.

9. Comment: The text should be corrected to incorporate this information (e.g., At sub area A3, antimony, iron, manganese, 2-butanone, tetrachloroethene, 1,1,1-trichloroethane, toluene, xylene, 1,1-dichloroethane, and trichloroethene were identified as major contributors to the estimated potential risk).

Response: The Navy agrees to revise the text per MPCA's suggestion.

10. Comment: It would be very useful for the reader to see the magnitude of the level of exceedence. I suggest that the individual HQ and ICR be included in Table 2-19. Presenting this information in this way will clearly and easily convey that a limited number of sampling locations are hot spots. I would also recommend including duplicate sample (e.g., AT008D, SA3-SCS-40) concentrations in Table 2-19 since this is relevant information.

Response: The Navy agrees to revise table 2-19 per MPCA's suggestion.

11. Comment: A table similar to Table 2-19 (modified as suggested above) is also requested for the Industrial and Minor Frequent Construction Worker. Again, presenting the information in this format will allow the reader to easily identify the limited locations with hot spots.

Response: The Navy agrees to provide the table(s) per MPCA's suggestion.

12. Comment: Page 7. Section 3, Summary/Conclusions.

This section does bullet/summarize the human health results, by receptor type, for direct contact with soil. A discussion should be added which presents the overall conclusions based on the results.

Response: The Navy agrees to provide the discussion per MPCA's suggestion.

13. Comment: Based on the results it appears to me that the level of contamination within areas A1, A2, B1, B2, D, F and "Other" is not of concern if the land use is limited to industrial/restricted commercial use. In the remaining areas (i.e., A3, A4 and E) localized areas of contamination (i.e., hot spots) resulted in potential risk levels that exceed levels of concern. Removal of these localized areas would significantly decrease the estimated risk and potentially eliminate the need to restrict access to these locations.

Response: The Navy is currently working with the Partnering Team to determine how to proceed with areas A3, A4, and E. The Navy is optimistic that risk management decisions can be developed that acknowledge that although these areas narrowly fail a conservative human health risk assessment exposure scenario(s), active remediation is not necessary to enable protectiveness. As the property is already expected to be land-use-controlled in

any transfer scenario, an additional control, such as restricting access to key areas, is likely to be acceptable to the Navy.

14. **Comment:** In Subarea A3 contamination in the vicinity of sampling locations AT009, AT007, and AB043 at depths of approximately 6 – 10 feet bgs are largely responsible for the exceedences. These sampling locations are located in and near the area where drum removal occurred and where a decontamination pad exists. The levels of contamination in these locations may also be contributing to the degradation of groundwater.

Response: No response required.

15. **Comment:** Sample results from location AT008D may also be of concern but the results from duplicate samples give inconsistent results. Confirmation sampling in this area is needed in order to confirm the level of contamination.

Response: As of the Partnering Team Meeting on April 25, 2001, the Team determined that the risk assessment would be finalized using the higher of the two inconsistent duplicate sample results, versus confirmation sampling.

16. **Comment:** In Subarea A4 contamination in the vicinity of sampling location AB032 and AT001 at depths of < 3 feet bgs and AT004 at depths of 3 – 5 feet bgs are largely responsible for the exceedences.

Response: No response required.

17. **Comment:** Sample results from location SA3-SCS-40 may also be of concern but the results from duplicate samples give inconsistent results. Confirmation sampling in this area is needed in order to confirm the level of contamination.

Response: As of the Partnering Team Meeting on April 25, 2001, the Team determined that the risk assessment would be finalized using the higher of the two inconsistent duplicate sample results, versus confirmation sampling.

18. **Comment:** In Subarea E contamination in the vicinity of sampling location EB004 at a depth of 1 – 3 feet bgs is largely responsible for the exceedence.

Response: No response required.

19. **Comment:** Also, since it has been several years since these areas have been characterized and the magnitude of the exceedences is often a factor of 2 or less I would recommend that before any remedial action is taken (whether that is removal, imposing institutional controls or both) confirmational sampling be conducted in these areas for the COC.

Response: The Navy may evaluate confirmation-sampling plans in the proposed plans or other remedy selection documents, as appropriate, but not in the risk assessment or RI Report.