



Minnesota Pollution Control Agency

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

October 5, 2004

Mr. Douglas Hildre, P.E.
Environmental Control Manager
United Defense LP
Armament Systems Division
4800 East River Road
Minneapolis, MN 55421-1498

RE: United Defense, L.P. Letter, Dated August 26, 2004, Corrective Action Agreement

Dear Mr. Hildre:

The Minnesota Pollution Control Agency (MPCA) staff has reviewed United Defense, L.P. (UDLP) letter, dated August 26, 2004, which was submitted pursuant to the Corrective Action Agreement between the MPCA and United Defense, L.P., dated March 24, 2003.

The MPCA staff hereby approves the latter as modified by Attachment I.

If you have any questions regarding this letter, please contact me at (651) 296-7818.

Sincerely,

A handwritten signature in black ink, appearing to read "David N. Douglas".

David N. Douglas
Project Manager
Superfund Unit 2
Superfund Section
Majors and Remediation Division

DND:csa

Enclosure

cc: Thomas Smith, U.S. Environmental Protection Agency
Dan Owens, US Navy
David Brayak, Tetra Tech NUS, Inc.

Attachment I

Modifications to United Defense, L.P. Letter, Dated August 26, 2004

Item GC1.1, page 2 and 3

The Minnesota Pollution Control Agency (MPCA) staff can agree that natural attenuation of the DCE and VC does not strictly depend on the complete reductive dehalogenation to ethene. The concern remains, however, as originally stated in our comment: the absence of ethene in the ground water brings into question the fate of the cis-DCE or vinyl chloride that is generated in the ground water at the site. Arguments for alternative mechanisms for the destruction of DCE and VC will need to be supported with adequate evidence.

Item GC3 (2), page 4

The MPCA staff prefers to determine the list of monitoring wells to be sampled in the future upon completion of the investigation work covered by this work plan.

Item 1, page 4,

The MPCA staff and UDLP will continue to disagree whether TW-10 and TW-11 are down gradient of the Former Paint Shop in the intermediate zone.

Item 2, page 5

There is a difference between fine to medium sand and silty fine sand that affects the hydraulic conductivity. The difference in materials was apparent enough so that the material has been described as different materials by individuals compiling descriptive logs of the lithologies encountered during drilling. Since the materials are all part of the unconsolidated glacio-fluvial deposits, they are part of the same unit (although there is no formal formation designation). It is the responsibility of UDLP to accurately report the materials encountered during drilling and to accurately depict them on geologic cross sections. The MPCA staff does not view this comment as a negotiable item for future reports.

Item 4, page 5,

See response to Item 2.

Item 15, page 11

It is apparent that UDLP and the MPCA staff will continue to disagree about the role of textural and compositional differences in geologic materials and how hydraulic properties might be affected. It should be noted that the MPCA staff has not suggested that silty sand is a barrier to ground water flow as stated in the response to comments (RTC). However, the MPCA staff has stated that it is possible that fine to medium sand may provide a preferential pathway for ground water over a silty sand due to the higher hydraulic conductivity of the sand.

Item 17, page 12

In the MPCA staff modification to the original report, the staff requested that UDLP conduct "exploratory borings" in the area of MW-UD58-I and UST-MW2. In the last meeting with UDLP concerning this matter, the MPCA staff discussed the need for exploratory borings at two locations. Those locations cited were at the MW-UD58-I location and the UST-MW2 location. The MPCA staff showed UDLP a map that indicated these locations as areas where test borings should be conducted. The MPCA staff discussed the need for deep zone information at the MW-UD58-I location and for intermediate and deep zone information at the UST-MW2 location. The work plan proposed does not reflect the level of effort that was discussed during the meeting. The MPCA staff requests that UDLP modify the work plan to include the level of effort outlined by the MPCA staff at the meeting.

Comment:

Item 7, pages 7-8,

Please note that perchloroethylene (PCE) has been found in the Former Paint Shop plume and in the unconfined and confined UDLP plumes identified in the report entitled, "Results of Vertical Aquifer Profiling and Seep Assessment," dated August 19, 2004. Also PCE has been identified as an original FMC Site contaminant of concern (please see page 4 of the CERCLA Five-Year review for the FMC Site, dated March 17, 2004).

UDLP
MPCA
CERCLA
Five-Year
Review
March 17, 2004