



Minnesota Pollution Control Agency

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

September 6, 2005

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

RE: "RCRA Facility Investigation" Report, dated June 2005 Corrective Action Agreement

Dear Mr. Hildre:

The Minnesota Pollution Control Agency (MPCA) staff has reviewed the report entitled "RCRA Facility Investigation," dated June 2005, that 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 report as modified by Attachment I to this letter.

The MPCA staff approves the recommendation contained in the report that a Corrective Measures Study be conducted to evaluate potential remedial options for the Former Paint Shop plume at the Armament Systems Division Plant.

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 and Emergency Response Section
Remediation Division

DND:csa

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

Attachment I

Modification to the Report Entitled, "RCRA Facility Investigation," Dated June 2005

3.6 AOC-UD03-FORMER PAINT SHOP, page 32, second paragraph

The MPCA staff requests that tetrachloroethene be added to the list of primary volatile organic compounds because concentrations of tetrachloroethene in the plume exceed ground water standards.

Section 3.7, NATURAL ATTENUATION EVALUATION, Contaminant Trends Over Time, Page 37, paragraph 2, second sentence

The statement that aerobic degradation of perchloroethylene (PCE) may be occurring is not correct as PCE is not aerobically biodegradable. The MPCA staff requests "(and in some cases aerobic biodegradation)" be removed from this sentence.

Section 3.7, NATURAL ATTENUATION EVALUATION, Contaminant Trends Over Time, Page 37, paragraph 2

While the presence of 1,2-dichloroethene (cis) and vinyl chloride indicate that anaerobic biological degradation of trichloroethene (TCE) and PCE is occurring, the discussion in this paragraph must include the implication of a lack of ethene and ethane in the ground water. The MPCA staff requests that the following text be inserted at the end of this paragraph and be identified as an unresolved issue in the "Conclusions and Recommendations" section:

However, the absence of ethene and ethane in the ground water suggests that biological reductive dehalogenation of the contaminants is not complete. Therefore, the fate of 1,2-dichloroethene (cis) and vinyl chloride in the ground water at this site is not clear.

4.0 CONCLUSIONS AND RECOMMENDATIONS, page 63, item 10

In addition to the monitoring wells listed to be sampled in interim support of the RCRA program, the MPCA staff requests that wells MW-UD61-I and MW-UD65-S be included for sampling. The MPCA staff requests that data from these wells, at a minimum, be used to construct iso-concentration cross sections to monitor the progress of the remedy for the Former Paint Shop spill and be identified as such in the Corrective Measures Study. The final monitoring requirements for the Corrective Measures Study will be determined when the plan is developed and approved.

Appendix C, Natural Attenuation Forms

The modeling of natural attenuation by BIOCHLOR assumes that vinyl chloride is degrading to ethene. However, because ethene has not been detected in the ground water, the assumption that vinyl chloride is degrading may be incorrect. The MPCA staff requests that the report be modified to clarify the assumptions made in the model simulations.