

Minnesota Pollution Control Agency

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 1, 1995

Mr. David Cabiness, Code 1862
Commanding Officer
Southern Division
Naval Facilities Engineering Command
PO Box 190010
North Charleston, South Carolina 29419-9010

RE: Naval Industrial Reserve Ordnance Plant Site

Dear Mr. Cabiness:

The Minnesota Pollution Control Agency (MPCA) staff has reviewed the document entitled "Workplan for Improvement of Groundwater Containment System Effectiveness for the Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota," (Workplan) dated January 31, 1995, for Operable Unit I for the Naval Industrial Reserve Ordnance Plant (NIROP) Site. The Workplan was submitted pursuant to the Federal Facility Agreement (FFA), dated March 27, 1991, between the MPCA, the U.S. Environmental Protection Agency (EPA), and the Navy.

The MPCA staff hereby approves the Workplan with modifications identified in Attachment I to this letter. The Navy shall modify the Workplan and resubmit a Final Workplan within 45 days of receipt of this letter. Comments regarding the Workplan are identified in Attachment II to this letter. It is not necessary for the Navy to respond to comments found in Attachment II.

On February 7, 1995, the MPCA staff received a telefax from you containing a schedule for upcoming work for the NIROP Site. As you stated during a February 16, 1995, telephone conversation with David Douglas of my staff, the schedule was submitted in response to a letter, dated January 27, 1995, from Robert Bowden, EPA, to Sid Allison, Navy, regarding EPA's request for a comprehensive site schedule as a part of the settlement of the Navy's noncompliance with the FFA.

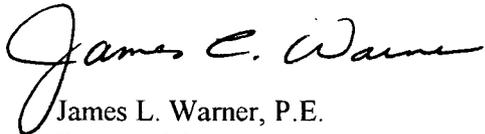
In a telephone conversation between Mr. Douglas and EPA's Tom Bloom, Mr. Bloom agreed that EPA would take the lead in responding to this proposed schedule without further direct comment from the MPCA staff to the Navy because the schedule is now a part of the settlement negotiations.

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As you are aware, the Navy has proposed a schedule in Section 7 of the Workplan. The MPCA staff approves this schedule to the extent that it is compatible with the schedule reached by the parties to settle the Navy's noncompliance with the FFA and to the extent that it does not conflict with the FFA.

If you have any questions regarding this letter, please contact David Douglas of my staff at (612) 296-7818.

Sincerely,



James L. Warner, P.E.
Division Manager
Ground Water and Solid Waste Division

JLW:ch

Enclosures

cc: Sidney Allison, Navy, Southern Division
Eric Gredell, RMT, Inc.
Thomas Bloom, U.S. Environmental Protection Agency
Tim Thurlow, U.S. Environmental Protection Agency

ATTACHMENT I

Modifications to the Workplan for Improvement of Groundwater Containment System Effectiveness for the Naval Industrial Reserve Ordnance Plant - Fridley, Minnesota January 1995

1. **Section 2, Page 12, Paragraph 3 - Hydraulic Containment Effectiveness - December 1993 Operating Conditions.** The statement that the deficiency in hydraulic containment in the northwestern area of the site is less critical than the southwestern portion of the site requires clarification. It is just as important that ground water clean-up objectives be met in this area as in other areas. Clean-up objectives require that clean-up levels be met at the property boundary. The statement shall be clarified to reflect that clean-up objectives will be met in this area at the property boundary as required in the Record of Decision (ROD).
2. **Section 3, 3.2, Page 26 - Ground Water Extraction System Upgrading.** It was the Minnesota Pollution Control Agency (MPCA) staff's understanding that a preliminary evaluation of the reduced efficiency of the existing system had been carried out by RMT and that the reduced efficiency was largely a result of a valve or manifold where all system piping comes together at the treatment building. It was also MPCA staff's understanding that if this problem was corrected that it was anticipated that piping scaling would significantly be reduced due to the increased flow volumes in the pipes. It was MPCA staff's understanding that this evaluation would be completed and that the proposals for the existing piping modifications would be included in this work plan.

The status of the evaluation, a schedule for the completion of the evaluation, and an explanation of how the evaluation results will be communicated to the regulatory agencies shall be included in the work plan.

In the event the combined pumpout effluent is sent directly to the sanitary sewer this restriction may be eliminated temporarily from the system; however, when Phase II treatment is initiated this restriction will again become a problem and may need to be corrected in the event that the new wells are added and the effluent requires treatment before discharge to the sanitary sewer. Clarification of the scheduling for rectifying this problem shall include reference to how timing of correcting the restriction fits with new well startup as well as with Phase II treatment.

The MPCA staff is concerned about the completion of the evaluation and the schedule for rectifying any design problems so that the corrections to the existing system may be made to coincide with the installation of the two new wells. The capture efficiency is related not only to the addition of new wells, but also is dependent on the correction of design problems with the existing system. Capture is dependent on the implementation of both modifications. Any delay in the implementation of these two components or additional modifications to the system, as referenced in Section 6.1.3, will also delay the collection of data for the next determination document and delay the delivery of the determination document required by the Federal Facilities Agreement (FFA).

3. **Section 4, 4.1, Page 33 - Extraction Well Design and Construction.** The design and construction section does not include a discussion of the well development methods to be used to develop the new wells. A discussion of well development methods shall be included in the work plan. Development of the new wells shall occur before the wells are put into service.
4. **Section 6, 6.1.4, Page 40 - Air Emissions.** The work plan shall reference the September 7, 1994, MPCA approval letter of the "Proposed Excellence Control Plan to Lower Air Emission Rate at Naval Industrial Reserve Ordnance Plant (NIROP) Fridley - June 19, 1994" for the requirement to reevaluate carbon consumption after the new wells are installed.
5. **Section 6, 6.2, Page 41 - Evaluation of Hydraulic Containment Effectiveness.** The schedule and relationship of the start-up period (Section 6.1.1), the two weeks of continued operation required of the system before the system is turned over to United Defense (Section 6.1.1), the four week period of continuous operation to reach hydraulic equilibrium (Section 6.1.2), and the four weeks of operational data required for the evaluation for the determination document is not explicitly identified in the work plan. The collection of data for the evaluation of the effectiveness of the system to achieve capture of the plume shall start after the system shakedown period is completed and the system is declared to be operational and the aquifer is determined to have reached equilibrium.

The work plan shall include a timeline chart which shows the various time periods referenced above to show when the shakedown period ends, the two weeks of operation are achieved for turn over of the system to United Defense, when aquifer equilibrium is reached (estimated to be four weeks), and when data collection for the determination of capture starts and ends.

There is no reference to the Determination Document required in the FFA. The schedule shall be modified to change the "memorandum on containment evaluation" to the determination document required by the FFA and to include when the determination document will be delivered to the regulatory agencies.

ATTACHMENT II

Comments to the Workplan for Improvement of Groundwater Containment System Effectiveness for the Naval Industrial Reserve Ordnance Plant - Fridley, Minnesota January 1995

1. Section 4, 4.3.1, Page 36 - Pumping Rates. The Record of Decision (ROD) specifies that the Navy has 365 days to complete the design of the Phase II treatment after approval of the determination document. Baring any delays in the system upgrade and the delivery of the determination document it is not anticipated that the Minnesota Pollution Control Agency (MPCA) staff approvals will delay the Phase II design process.
2. Section 4, 4.3.3, Page 36 - Required Effluent Quality. The MPCA staff does not anticipate that during the review process that the effluent limits for discharge to the river will change in the permit which would cause need for redesign of the system.