



# Minnesota Pollution Control Agency

February 27, 1996

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Scott Glass, Code 18610  
Commanding Officer  
Southern Division  
Naval Facilities Engineering Command  
P.O. Box 190010  
North Charleston, South Carolina 29419-9010

RE: Naval Industrial Reserve Ordnance Plant

Dear Mr. Glass:

The Minnesota Pollution Control Agency (MPCA) staff has reviewed your letter of January 10, 1996, responding to MPCA staff letters of August 4 and August 30, 1995. The letter concerns the Naval Industrial Reserve Ordnance Plant Site and were submitted pursuant to the Federal Facility Agreement (FFA), dated March 27, 1991, between the MPCA, the U.S. Environmental Protection Agency, and the U.S. Navy (Navy).

The MPCA staff approves the letter as modified by Attachment 1 to this letter. The Navy shall incorporate these modifications in the draft Operable Unit 3 Remedial Investigation/ Feasibility Study Work Plan.

If you have any questions regarding this letter, please contact me at (612) 296-7818.

Sincerely,

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

David N. Douglas  
Project Manager  
Response Unit 1  
Site Response Section  
Ground Water and Solid Waste Division

DND:ch

Enclosure

cc: Sidney Allison, Navy, Southern Division  
David Cabiness, Navy, Southern Division  
Thomas Bloom, U.S. Environmental Protection Agency

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## Attachment 1

### Modifications to the Navy's Letter of January 10, 1996, "OU2/OU3 Combination and DNAPL Issues"

#### I. Cover Letter:

**Second Paragraph:** The Navy states that results from the Operable Unit 2 (OU2) Remedial Investigation (RI) will be incorporated "by reference" into the Operable Unit 3 (OU3) RI/Feasibility Study (FS). The OU2 data shall be incorporated into the OU3 RI/FS Report (Report). The OU2 data shall include, but not be limited to, discussions of contaminated areas, calculation of volumes of contaminated soil, and source area discussions as they relate to ground water contamination. The OU2 data, in combination with OU3 data [including dense, nonaqueous phase liquid (DNAPL)] shall be included in all maps and cross sections depicting contamination at the Naval Industrial Reserve Ordnance Plant (NIROP) Site. The Navy shall contact the Minnesota Pollution Control Agency (MPCA) staff during the writing of the Report to determine any other data that the MPCA staff needs in the Report.

#### II. The Navy's Attachment 1, "Navy Response to MPCA Letter Dated August 4, 1995:"

- A. **Response 1:** It is not clearly stated that the Navy intends to conduct seismic reflection in the North 40 area. The Navy shall conduct seismic reflection in the North 40 area to aid in the investigation of the potential for DNAPL in the barrel pit areas.
- B. **Responses 5 and 6:** Provision for testing soil and ground water samples for methanotrophic bacteria and for oxygen, sulfate, and reduced iron were not specifically addressed in the draft OU3 RI Work Plan (Work Plan). Although the comment on page 1-8 of the draft OU3 Work Plan (Step 4, Phase III) states that "intermediate and deep groundwater sample chlorinated organics analyses and soil sampling for chemical analysis and engineering parameter determination," it is unclear what is specifically intended. The Navy shall include these tests in the RI and these tests shall be included in the Work Plan.
- C. **Response 7:** The MPCA staff reiterates its position that the Navy conduct a risk assessment for at least the unrestricted and industrial land use scenarios until such time as land use for OU3 is verified. The MPCA staff believes that this is the best way to proceed at this time to avoid an incomplete risk assessment. Please understand that conducting a risk assessment for both land use scenarios does not commit the Navy to either one at this time; it merely positions the Navy to proceed with the rest of the OU3 RI/FS work without delay caused by this matter being unresolved.
- D. **Responses 8 and 10:** Reference to fate and transport modeling was not included in the draft Work Plan. The Navy shall include it in the Work Plan.

### III. The Navy's Attachment 2, "Navy Response to MPCA Letter Dated August 30, 1995:"

- A. **Response 5:** In its response, the Navy has failed to consider paragraph 1 of page 4 of the OSWER No. 9355.7-04 directive which speaks of the use of the directive. The directive is relevant in "...situations where surface soil is the primary exposure pathway. Generally, where soil contamination is impacting ground water, protection of the ground water may drive soil cleanup levels. Consideration of future ground water use for CERCLA sites is not addressed in this document. There are separate expectations established for ground water in the NCP rule section 300.430 (a) (1) (iii) (F) that 'EPA expects to return to return usable ground waters to their beneficial uses whenever practicable, within a timeframe that is reasonable given the particular circumstances of the site'."

In the OU2 RI, it was established that a certain amount of soil in the North 40 area was contaminated at levels which leached contaminants to ground water, thereby causing contamination of otherwise usable ground waters. The OU2 RI identified these areas (see Figure 1, Area of Soil Requiring Cleanup Based on MPCA Leaching Model Results). An institutional control remedy as a sole remedy for OU2/OU3 is not consistent with the portion of the directive that has been referenced above. Therefore, institutional controls are inappropriate as a sole remedy for OU2/OU3. Therefore, the Navy shall evaluate remedial actions to address contaminated soils in the North 40 area (that are indicated on Figure 1 of the OU2 RI) in the Report.

- B. **Responses 6, 7, 8, and 9:** The Navy indicated that it concurs with comments 6, 7, 8, and 9 in the MPCA staff letter dated August 30, 1995. However, in comment 6 of the August 30, 1995, letter, MPCA stated that "[t]he OU2 RI indicates that contaminated soil exists above the MPCA cleanup levels at the Site ... and that soil remediation is required." Navy's concurrence with this statement appears inconsistent with the response to comment 5, 11, and 12. The Navy shall clear up this inconsistency.