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NIROP FRIDLEY  
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# Minnesota Pollution Control Agency

January 21, 2003

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

Commanding Officer  
Southern Division  
Naval Facilities Engineering Command  
Attn.: Jeff Meyers, Code ES32  
P.O. Box 190010  
North Charleston, SC 29419-9010

RE: Naval Industrial Reserve Ordnance Plant Superfund Site

Dear Mr. Meyers:

The Minnesota Pollution Control Agency (MPCA) staff has reviewed the document entitled, "Record of Decision for Operable Unit (OU) 2 and Operable Unit (OU) 3," (draft ROD), dated November 2002. The Draft ROD is for Operable Units 2 and 3 of the Naval Industrial Reserve Ordnance Plant (NIROP) Superfund Site and was submitted pursuant to the Federal Facility Agreement, dated March 27, 1991, between the MPCA, the U.S. Environmental Protection Agency, and the U.S. Navy (Navy).

The MPCA staff's responses to the Draft ROD are listed in Attachment I of this letter. The MPCA staff requests that the Navy modify the Draft ROD in accordance with these responses within 30 days of receipt of this letter.

It is my understanding that the Navy consulted the following document in the preparation of the Draft ROD, "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents," OWSER 9200.1-23P, EPA 540-R-98-031, PB98-963241, dated July 30, 1999, (ROD Guidance). The MPCA staff also consulted this guidance document in the preparation of our response to the Draft ROD.

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

Sincerely,

A handwritten signature in cursive script that reads "David N. Douglas".

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

DND:ais

cc: Gary Schafer, US Environmental Protection Agency (w/enclosures)  
Mark Sladic, Tetra Tech NUS, Inc. (w/enclosures)  
520 Lafayette Rd. N.; St. Paul, MN 55155-4194; (651) 296-8300 (Voice); (651) 282-5332 (TTY)  
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**Attachment I****Responses to the****"Record of Decision for  
Operable Unit (OU) 2 and  
Operable Unit (OU) 3,"****Dated November 2002****1.1 Site Name and Location**

None of the figures in the draft ROD clearly show the aerial boundaries of Operable Units 2 and 3. Add a map that clearly delineates the aerial boundaries of these operable units.

Add this statement at the end of the sentence, "The Administrative Record is at the St. Paul offices of the MPCA."

**1.2 Statement of Basis and Purpose***First paragraph*

Add this statement the paragraph, "The Selected Remedy for Operable Units 2 and 3 was chosen in accordance with the requirements of the Minnesota Environmental Response and Liability Act, Minnesota Statutes Sections 115B.01 - 24 (MERLA)."

*Second paragraph*

Delete the sentence, "The State of Minnesota concurs with the Selected Remedy." Add the sentence, "The Minnesota Pollution Control Agency (MPCA) concurs with the Selected Remedy."

**1.3 Assessment of Site***First paragraph*

At the end of the paragraph add the following sentences, "The overall site strategy is to cleanup contaminated ground water and source areas that contribute to ground water contamination. Source areas have been remediated as summarized in Section 2.2."

**1.4 Description of Selected Remedy**

After the last bullet on page 1-2, add the following paragraph, "Several remedial actions involving the cleanup of surface and subsurface source areas have been implemented in Operable Unit 2 as explained in Section 2.2. No remedial action for the cleanup of the only subsurface source area in Operable Unit 3 - the Former East Plating Shop area - have been implemented."

## 2.1 Site Name, Location, and Brief Description

### *Fourth paragraph*

Delete the sentence, "The site is principally an industrial facility." This statement is confusing with respect to Operable Units 2 and 3. Also the "site" is not defined with respect to property boundaries. Add the sentence, "Operable Units 2 and 3 are located on the NIROP facility and EPA has determined that the reasonably anticipated future land use for the facility is industrial use."

## 2.2 Site History and Enforcement Activities

### *Paragraph eight*

Delete the first three bulleted items and replace with Item (A) from Section 2.2 of the FFA as the latter reference speaks to the identification of remedial actions for operable units which is the purpose of the ROD.

## 2.3 Community Participation

Add a paragraph that explains the Navy's efforts to form and sustain a Restoration Advisory Board. A suggested narrative is provided below

Ever since, \_\_\_\_ 19 \_\_, when the Navy formed a Restoration Advisory Board, the Navy has continued to support the RAB which has served to inform the community about the investigation and remedy selection for Operable Units 2 and 3 and to provide a mechanism for community input. Citizens and county and city officials have attended the RAB meetings.

Another community participation effort is the effort to establish the reasonably anticipated future land use for NIROP. EPA, in consultation with the Navy and MPCA, worked with the City of Fridley to establish that the reasonably anticipated future land use for NIROP is industrial use. EPA followed its Office of Solid Waste and Emergency Response (OSWER) Directive No. 9355.7-04 to make this determination. The Selected Remedy complies with the industrial use scenario. (See EPA letter dated March 4, 1997 from Tom Bloom to William Burns, City Manager, City of Fridley.)

## 2.4 Scope and Role of Operable Unit or Response Action

This section should describe the overall site cleanup strategy and how the Selected Remedy for Operable Units 2 and 3 fit into the strategy. Therefore, to this section, add Section 6.3.1, Conceptual Site Model and Figure 6-1 from the "Remedial Investigation for Operable Unit 3, Revision 2," dated April 2002. (See Highlight 6-10 of the ROD Guidance.) Also identify the authorities under which each action will be/has been implemented. (See Section 6.3.4 of the ROD Guidance.)

*Last paragraph*

Add a map that clearly delineates the aerial boundaries of these operable units.

**2.5 Site Characteristics, Operable Unit 2 (OU2)**

The site characteristics identified in this section were superseded as reported in the "Supplemental Remediation Investigation Information Report," dated September 2001. Replace the OU2 narrative with a summary of narrative from Section 7.1, Supplemental Remedial Investigation Information Report of the "Remedial Investigation for Operable Unit 3, Revision 2," dated April 2002, as it applies to contaminants of concern (COCs) as the focus of this section is COCs. (See Section 6.3.5 of the ROD Guidance.)

**2.9 Description of Alternatives, Alternative 2: Land Use Controls (Engineering Controls and Institutional Controls)**

As the MPCA staff has previously indicated, the Navy needs to take credit for all of the previous OU2 cleanup work that has been identified in the ROD. Therefore, Alternative 2 should be renamed Soil Excavation and Land Use Controls.

*Third Paragraph*

Change the narrative "Institutional controls are legal mechanisms" to "Institutional controls are non-engineering mechanisms." (See footnote 16 for Section 6.3.9 of the ROD Guidance.)

**2.11 Principal Threat Waste***Last Sentence*

Change the narrative "measured in soil at NIROP" to "measured in OU2 and OU3 soil at NIROP."

**2.12 Selected Remedy**

The institutional controls shall be re-written to be the same as the institutional controls identified in Figure 2-5, e.g., for area A4, no disturbance of soils (3) feet or greater below ground surface without prior written approval of EPA and MPCA. Note reference to EPA is missing in the second bullet of this section.

The Navy discusses two property uses for NIROP, industrial and restricted commercial use. While the MPCA planned land use definitions are similar as explained in MPCA's "Site Response Section Site Evaluation Manual," remedial investigation and risk assessment decisions that have lead to the Selected Remedy were based on the anticipated future land use being industrial use. (See EPA's letter of March 4, 1997 to the City of Fridley.) Zoning authorities' definition of commercial land use varies widely. The Navy has not provided any documentation that Fridley, NIROP's zoning authority, has zoned NIROP for either Commercial or Restricted

Commercial use. Therefore, the Navy shall delete reference to restricted commercial land use in the Draft ROD.

The Minnesota Department of Health had informed the MPCA staff that the MDH is in process of amending the existing Special Well Construction Area (SWCA) that incorporates areas east of Central Avenue related to the Twin Cities Army Ammunition Plant ground water contamination problems. The extended SWCA will include an area west of Central Avenue to the Mississippi River and south of Interstate 694, which will include all of NIROP and Anoka County Riverfront Park.

The bulleted institutional controls cited in this section shall be deleted and replaced with the following bulleted institutional controls.

- Categorical Land Use Restriction:

The Navy covenants that the NIROP facility, consisting of certain real property, totaling 80.35 acres, located in the city of Fridley, Anoka County, State of Minnesota, shall be used only for industrial uses. Prohibited unrestricted uses shall include, but not be limited to, any child care, pre-school, playground and any form of housing.

- Well Installation / Groundwater Extraction Restrictions

The Navy covenants that no water supply wells shall be installed on the NIROP facility without prior written approval from the appropriate regulatory agencies; nor shall any groundwater be extracted from beneath the Property unless such groundwater has been tested and found to meet applicable standards for human consumption, or other intended use, and prior written approval has been obtained by the appropriate regulatory agencies.

- Soil Disturbance Restrictions

- a. Soils Beneath Main Industrial Building

The Navy covenants that no soil disturbance or alteration of any nature shall take place beneath and in the area beneath the former Plating Shop within the Main Industrial Building without the prior written approval of the EPA and MPCA. Figure 2-5 reflects the area to which this restriction applies. Any soils excavated from any Designated Restricted Area as identified in Figure 2-5 shall not be removed from the Property unless such removal is in accordance with a workplan approved by the MPCA and EPA.

- b. Soils Outside Main Industrial Building

The Navy covenants that no soil disturbance or alteration of any nature shall take place greater than three feet below ground surface in those Designated Restricted Areas as identified in Figure 2-5 without the prior written approval of the EPA and MPCA. Any soils excavated from any Designated Restricted Area as identified in Figure 2-5 shall not be removed from the Property unless such removal is in accordance with a work plan to be approved by the MPCA and EPA.

c. Soils Outside Designated Restricted Areas

This restriction does not apply, and no prior approval of the EPA or MPCA shall be required with respect to activities on any portion of the NIROP facility outside of these Designated Restricted Areas, including without limitation activities related to maintenance or repair of existing buildings, structures, underground sewer, water, gas, electrical or telephone services, or installation of fencing and signage when such activities are not expected to, or are not reasonably likely to result in, any disturbance of or intrusion into soil/groundwater within the Designated Restricted Areas.

• Required Notices / Certifications:

a. Intended Change in Land Use

The Navy covenants that it will (i) provide written notice to the EPA and MPCA of its intent to use the NIROP facility for anything other than industrial use at least 90 days prior to executing any such plans; (ii) obtain approval for such change in land use from the appropriate zoning authority prior to providing such written notice; and (iii) provide a work plan for undertaking any environmental investigation and/or cleanup activities necessary to permit such a change in land usage no less than 90 days after the EPA and MPCA give the Navy approval to implement such a work plan.

b. LUC Compliance Certification

The Navy covenants that it shall provide annual written certifications by March 1st of each year to the MPCA and the EPA regarding continued compliance with the above-cited Land Use Controls (LUCs).

c. Intended Sale, Transfer or Conveyance of Land

The Navy covenants that it will: (i) provide written notice to the EPA and MPCA of its intent to sell, transfer, or convey any of the NIROP facility at least 90 days prior to executing any such sale, transfer, or conveyance; and (ii) provide written assurances to the EPA and MPCA that future owners will undertake the land use controls set forth herein.

**3.1.3 Summary of Comments Received During the Public Comment Period and Navy Response**

*Response to Comment 1:*

Change "poultry" to "pole-treating" in the last sentence.

February 3, 2003

SRF-5J

Mr. Jeffrey Meyers  
SOUTHDIV NAVFACENGCOM  
P.O. Box 190010  
North Charleston, S.C. 29419-9010

RE: Draft Record of Decision for Operable Units 2 and 3  
NIROP Industrial Reserve Ordnance Plant - Fridley, Minnesota

Dear Mr. Meyers:

The United States Environmental Protection Agency has completed its review of the above-referenced document. We have the following comments to offer:

**General Comment:** U.S. EPA agrees with the proposed remedy in principle. However, additional language needs to be added to the ROD which will provide a reasonable amount of information as to the scope of the remedy and the various responsibilities associated with the implementation of that remedy.

EPA agrees with the concept of a Land Use Control Implementation Plan (LUCIP), as identified in Section 2.12 of the Draft ROD. However, the Agency feels that it is imperative to link this document to pre-existing RD/RA draft primary documents as provided for in Section 32.2 of the 1991 Final NIROP Federal Facility Agreement (FFA).

Since the proposed remedy is of such limited scope, EPA proposes that the LUCIP (as proposed by the Navy), be renamed to the "Draft NIROP Operable Unit 2 and 3 Remedial/Design/Remedial Action Work Plan". In this way, the "LUCIP" (as proposed in the Draft ROD), is clearly tied to existing primary documents as identified in the NIROP FFA.

**Section 1.1:** A map or figure depicting the boundaries of Operable Units 2 and 3 are needed.

**Section 2.1, last paragraph:** The document states: "The NIROP site consists of the government-owned part of the NIROP building, the area outside of the building referred to as the North 40, and the contaminated groundwater plume that has migrated from the NIROP property." Please ensure that this description matches the one used for the NPL.

**Section 2.2:** Please modify this section to include the information on when the Site was proposed for the NPL, and when it went final, together with references to the pertinent Federal Register notices.

**Section 2.5, first full paragraph:** This paragraph also appears in Section 2.1, and can be deleted from this section.

**Section 2.7.6, p. 2-16:** In the Potential Risks to Industrial Workers, and the Potential Risks to Minor-Frequent Construction Workers, isn't the calculated ICR within rather than below U.S. EPA's acceptable ICR range? Please clarify.

**Section 2.8:** The remedial action objectives should be more specific. That is, the specific kinds of things that LUCs would prevent should be listed, e.g., no residential use or residential development of the property, no removal of the concrete floor in the NIROP building, etc. In addition, the following specific information needs to be included:

- \* List the parties responsible for monitoring, reporting and enforcement of the LUCs.
- \* Provide a detailed description of the area/property covered by the LUC. (Inclusion of a figure or map as outlined in our previous comment would be helpful, as well as text here).
- \* Provide the expected duration of the LUCs, and
- \* Refer to the Draft Remedial Design/Remedial Action Work Plan (see General Comment, above) for details regarding implementation, inspections, monitoring, Five-Year Review, etc.

**Section 2.9, Alternative 2, p. 2-18:** The Risk Assessment Summary on page 2-17 identifies the risks to Major Infrequent Construction Worker as "Unacceptable" for OU2 and OU3. Yet the description of Alternative 2 implies that there is no unacceptable risk to major infrequent construction workers. Is that because removal actions took place after completion of the risk assessment that would have altered the risk assessment's conclusions? Please clarify.

**Section 2.10, Comparative Analysis of Alternatives:** Please provide additional text in this section which specifically addresses the following:

- Please include additional discussion of ARARs. At a minimum, the Navy should at least state here where one can find the ARARs that have been identified for the site, i.e., in Table 2-31.
- With respect to "implementability," the Navy should discuss two issues. First, how institutional controls are to be implemented while the Navy still owns the property; and how they are to be implemented in the event the Navy transfers the property. With regard to the former, the Navy should describe the LUCIP,

and should identify it as a primary document, enforceable under the NIROP Federal Facility Agreement. (Please see previous comments regarding the renaming of the LUCIP to tie it to the FFA). With regard to the latter issue, the Navy should describe the process by which LUCs would be adopted and imposed upon any transferee. The Navy should acknowledge in the ROD that part of that process would be to change the LUCIP, i.e., to modify this primary document in order to accommodate the change in ownership. The Navy should discuss the availability in Minnesota of legal restrictions on property that run with the land. This is a state law question. Finally, the Navy should describe how the LUCs would be monitored and enforced, post-transfer.

This section of the ROD should also be the place where the Navy explains the situation with respect to the criterion, Reduction of Toxicity, Mobility or Volume of Contaminants through Treatment.

In the Nine Criteria table, the entry for "Compliance with ARARs" with respect to Alternative 1 should be "N/A" not "Criteria not met." No-action remedies do not have to meet ARARs. ARARs are cleanup criteria. They only come into play when a remedy actually involves cleanup. Why is the entry for "Short Term Effectiveness" under Alternative 1, "Criteria partially met"? It isn't obvious, and therefore some explanation should be presented along with the table.

With respect to the ARARs that are listed in Table 2-31, many of them do not seem to be ARARs, and may have been misidentified as such. ARARs are onsite cleanup criteria that relate to the contaminants involved in the cleanup, to the process of cleanup itself, or to the location of the cleanup. They are to be identified in the ROD, and they are frozen, unless it can be shown that new cleanup standards adopted post-ROD are necessary in order to protect human health and the environment. ARARS may not be the sum total of the laws and regulations that one must follow in conducting a cleanup. For example, any offsite activity connected with the cleanup must follow all current laws and regulations, whatever they may be. Hence, it is not wrong to say that state transportation laws have to be complied with for off-site shipments of hazardous substances. But it is wrong to call those transportation laws ARARs because they are not onsite cleanup standards, and they most definitely are not frozen at the time of the ROD. Rather offsite transport would have to meet the state standards in force at the time of transport rather than at the time the ROD was signed. With the foregoing as guide, EPA believes that the following laws and regulations are incorrectly identified as ARARs in Table 2-31:

Minn. Stat. 116.061 - What does air release reporting have to do with the proposed remedy?

Minn. R. 7045 - How are the State's hazardous waste standards implicated in a remedy involving institutional controls?

Minn. R. 7045.0261 and 7045.0270 - Offsite disposal is outside the purview of ARARs.

Minn. Stat. 103H and Minn. R. 4717.7100-.7800 - Are groundwater pollutants involved in either OU2 or OU3?

Minn. Stat. 144.98 and Minn. R. 4740 - Lab work takes place off-site, and as such, it is outside the purview of ARARs.

Minn. R. 5205 - Worker health and safety standards are not cleanup standards. They apply to worker health and safety on their own terms, not through being identified as ARARs in a ROD. As such, they are not frozen at the time the ROD is signed.

Minn. Stat. 221 and Minn. R. 8870 - Transporter standards involve offsite activity which is outside the purview of ARARs.

Minn. Stat. 138.40 - Does NIROP have historic or archaeological significance? Please clarify

**Section 2.11:** The last sentence in this section appears to be incorrect. If the site cannot be used without significant restrictions, how can it be accurate to say that there are no principal threats?

To what extent did the recent removal action impact this issue? Please clarify.

**Section 2.12:** The description of the remedy should include a proviso that the concrete floor can not be removed without concurrence from U.S. EPA and MPCA.

The explanation of the nature of industrial and commercial land use is rather general. U.S. EPA can accept this lack of specificity for the ROD. However the Navy must present considerably more specificity in the Remedial Design/Remedial Action Work Plan (LUCIP) and, in the event of transfer, the transfer documents.

**Section 2.12, page 2-21:** The document states: "Property is classified as industrial where use will not allow public access to areas where residual contamination may be present in soil." Would it be more accurate to say, "Property is classified at NIROP as either industrial or restricted commercial in order to prevent the kind of public access to areas with residual contamination that might occur under residential, general commercial, or recreational uses."?

**Section 2.12, page 2-21:** The document states: "In risk evaluation scenarios, potential occupational exposure assumptions are used in the calculation of cleanup levels." EPA agrees, but feels that this is a vague statement at best, requiring further clarification. In order to clarify this, EPA proposes the following language:

"A key assumption in the risk assessment for NIROP OU2 and OU3 was that a conversion of the site to residential or recreational land use with unrestricted access to

all parts of the site was not likely. Risks to potential residential or recreational users were therefore not evaluated. Rather, the risk assessment addressed the risks that might arise under either industrial or restricted commercial uses of the site, i.e., land uses more or less identical to those currently existing at the site. Industrial land use means . . . Restricted commercial land use means . . . . In order to ensure that the site is restricted to the uses evaluated and found acceptable under the NIROP risk assessment, land use controls will be implemented as follows . . .”

The discussion should then continue with the list of actions required to achieve the remedial action objectives. An example of such a list may be found in a recent Region 4 Navy ROD (Naval Air Station Cecil Field) which included the following list of actions required to implement an LUC remedy:

- Maintain the LUCs for as long as they are required to prevent exposure to hazardous substances or preserve the integrity of the remedy
- The Navy shall not modify, delete or terminate any LUC without EPA and [state] concurrence.
- The Navy shall be responsible for implementing, monitoring, reporting and enforcing the LUC.
- The Navy may delegate inspection and reporting responsibilities but will ultimately be responsible.
- Land Use Control Remedial Design: The LUC Remedial Design will be prepared as the land use control component of the Remedial Design. Within 21 days of ROD signature, the Navy shall prepare and submit to EPA and [the state] for review and approval, a Draft Remedial Design/Remedial Action Work Plan (“LUC Remedial Design”), for implementing, monitoring, reporting, and enforcing the Land Use Controls at OU\_\_\_. At a minimum the LUC Remedial Design shall address the following:
  - Identification of the OU\_\_\_ LUC objectives and goals
  - Provide a map of the site, which shows where the LUCs are to be implemented
  - Procedures for CERCLA 5-year remedy reviews for the LUC portion of the remedy
  - Inspection and monitoring frequency (include risk discussion)
  - Reports of inspection results
  - Notification procedures of changes in the risk, remedy or land use.
  - Notification procedures of planned property conveyance.
  - Full text of the deed restrictions or other LUC mechanisms, including metes and bounds
  - Responsibilities of the new property owner and state/local government agencies with respect to LUC monitoring, reporting and enforcement

- Responsibilities of the Navy with respect to LUC monitoring and enforcement
- Describe the mix of responsibilities among the Navy, new property owners and other government agencies dependent on state and federal laws and regulations practiced uniformly in the state.
- Describe notification procedures if any action should interfere with LUC effectiveness.

**Section 2-12, Page 2-22:** The discussion of how the remedy meets some of the 9 criteria should be moved to Section 2-10, Comparative Analysis of the Alternatives. All Section 2-12 should be is a detailed description of what constitutes the selected remedy. Additionally, the Navy states that "Although the comparison was conducted separately for each site, . . ." By "each site", does the Navy mean each Operable Unit? Please clarify.

**Section 2-13, Page 2-23:** The document states "Risk assessment indicates that surface soils, where human exposure would be most likely, do not exceed EPA and MPCA target risk levels."

Is this correct? How has the recent soil removal action at the site impacted this?

To clarify, this statement needs to include a reference to the assumptions in the risk assessment - i.e., land use restrictions that would limit access.

**Section 2.13, Page 2-23:** The document states: "LUCs, as described above, would be protective and permanent to the extent they remain in place, until such time as . . ." Please add "and are enforced" after "remain in place."

Please place a copy of this correspondence into the Administrative Record for the NIROP Fridley site. If you have any questions, please contact the U.S. EPA Remedial Project Manager, Mr. David Seely at (312) 886-7058.

Sincerely,

Gary M. Schafer P.G.  
Chief - Federal Facilities Response Section  
Superfund Division