



Brown & Root Environmental

A Division of Halliburton NUS Corporation

Foster Plaza VII
661 Andersen Drive
Pittsburgh, PA 15220-2745

(412) 921-7090
FAX: (412) 921-4040

C-49-07-7-163

July 23, 1997

Project Number 6966

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Kerry Morrow
NAVSEA Technical Representative
Naval Industrial Reserve Ordnance Plant
5001 East River Road
Minneapolis, Minnesota 55421

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order 0003

Subject: Naval Industrial Ordnance Plant, Fridley, Minnesota
Fact Sheet

Dear Mr. Morrow:

Please find enclosed thirty copies of the fact sheet describing the NIROP Fridley environmental cleanup program. Additional copies are being mailed to the RAB mailing list by B & R Environmental.

The enclosed copies are for distribution at your discretion. We can provide additional copies if requested.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Sladic'.

Mark Sladic, P.E.
Task Order Manager

Enclosure (30)

c: Debra Evans-Ripley, SOUTHDIV (w/o enclosure)
Scott Glass, SOUTHDIV (w/o enclosure)
File 6966



NAVAL INDUSTRIAL RESERVE ORDNANCE PLANT (NIROP) Fridley, Minnesota Environmental Cleanup Program

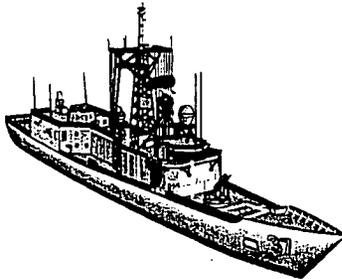
This fact sheet was developed to describe the cleanup activities that have been conducted at NIROP Fridley. It also explains the findings of the environmental investigations and outlines the future activities that are planned for the facility.

The fact sheet provides a brief summary of the many reports and reviews that have been written regarding NIROP Fridley. The fact sheet provides an overview of site conditions as well as those activities undertaken to ensure that the site is not an environmental or health hazard. The goal of the cleanup effort at NIROP Fridley is to protect human health and the environment, and the Navy is committed to meeting that goal.

The Naval Industrial Reserve Ordnance Plant (NIROP) in Fridley, Minnesota, is conducting environmental cleanup activities in cooperation with the United States Environmental Protection Agency and the Minnesota Pollution Control Agency. Under the Comprehensive Environmental Restoration and Liability Act (CERCLA), also known as Superfund, a facility must demonstrate that it can operate in an environmentally sound manner as well as show corrective action measures on sites where releases may have occurred. NIROP Fridley is conducting these cleanup activities in compliance with CERCLA regulations.

What is NIROP Fridley and what was done there?

NIROP stands for Naval Industrial Reserve Ordnance Plant. The NIROP Fridley plant in Fridley, Minnesota, was established in 1940 and began production in January 1941. The

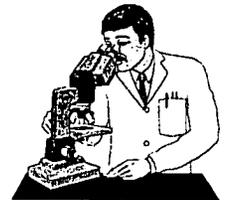


plant, which is still in operation today, is used to design and manufacture advanced Naval weapons systems. The northern portion of the facility is government owned and operated by a private contractor (United Defense LP), whereas the remainder of the facility is owned and operated independently by United Defense.

sometimes involved the use of chemicals that could affect the environment if they were released even where all current regulations were being followed. The Navy is committed to protecting both human health and the environment.

What sort of issues are of concern at NIROP Fridley?

Some of the manufacturing processes performed at the facility used a certain class of chemicals called organic solvents. Organic solvents are commonly used in manufacturing facilities and can be commonly found around the average household (even in



something as simple as nail polish remover). Generally, the investigations at the site have centered around volatile organic compounds (VOCs), which include many organic solvents. VOCs are typically light hydrocarbons that readily evaporate at ambient temperatures. Specifically, the contaminants of concern at the NIROP Fridley site are trichloroethene (TCE) and 1,2-dichloroethene (1,2-DCE). These chemicals are no longer used at the facility. Soil and groundwater are being closely monitored for these contaminants, as well as many other VOCs, since they can cause adverse health effects. Study results have indicated the presence of contaminants in the groundwater beneath the site and the general location of these contaminants.



Why are these investigations and activities necessary?

As stated above, CERCLA requires that a facility operate in an environmentally sound manner and take corrective actions in the event that chemicals were previously released to the environment. As is typical in most industrial facilities, the manufacturing processes used in the plant



If you have any questions about the environmental cleanup activities at Naval Industrial Reserve Ordnance Plant (NIROP) Fridley, Minnesota, please call Technical Representative, Patrick Morrow (612) 572-6360 or Resident Engineer, Pat Mosites (612) 572-6438.

What has been done so far to fix the problem?

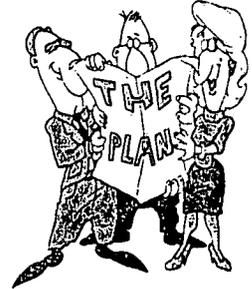


To date, many tasks have been performed at NIROP Fridley to determine the extent of the problem and to select a site remedy. Generally speaking, studies of the groundwater and of the soils outside the main

facility building have been performed by the Navy. This information was used to design an extraction system in which the groundwater is removed from the ground and sent to a pretreatment system where the VOCs are removed and the remaining water is sent to a water treatment plant for further treatment. The system has reduced the levels of VOCs in the groundwater to the level that the pretreatment step is no longer necessary, and now the groundwater is simply removed and treated at the public water treatment plant.

What is planned for the future?

Additional investigation activities are planned for the late summer of 1997. These activities will determine the nature and extent of the contamination under the plant itself. Additional soil and groundwater samples will also be collected in certain areas outside the building to confirm the results of previous investigations. The data collected during these activities will be used to support decisions on other remedial options. Furthermore, the effectiveness of the groundwater extraction system will continue to be monitored and evaluated to ensure that the NIROP Fridley facility is not a threat to the environment.



<p>For additional information contact:</p> <p>Patrick Morrow Technical Representative Naval Industrial Reserve Ordnance Plant NAVSEA/5001 East River Road Minneapolis, MN 55421</p>	<p>Pat Mosites Resident Engineer in Charge of Construction Naval Industrial Reserve Ordnance Plant 4800 East River Road Minneapolis, MN 55421</p>
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Patrick Morrow
Technical Representative
Naval Industrial Reserve Ordnance Plant (NIROP)
NAVSEA/5001 East River Road
Minneapolis, MN 55421

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