

**RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S
COMMENTS ON THE DRAFT SITE 18 STORM SEWER SYSTEM
SOLIDS AND DEBRIS REMOVAL ACTION CLOSE-OUT REPORT
FOR NAVAL AIR STATION ALAMEDA**

This document presents the Navy's responses to comments from the U.S. Environmental Protection Agency, Region IX, dated January 28, 1998, on the Draft Site 18 Storm Sewer System Solids and Debris Removal Action Close-out Report for Naval Air Station Alameda, dated December 1997.

General Comments

Comment 1: Reference is made on ES-2 and pg 14 to the fact that 15 percent of the lines were either too damaged to undergo cleaning or logistically impossible to access. Please supply the location of these sections of lines, manholes and catch basins and state specifically in which documents (e.g. which RI document) the problems with these lines will be addressed.

Response: Figure 2 in the Site 18 Removal Action Close-out Report shows the current status of all of the storm sewer lines at Alameda Point. As shown in the legend and on the figure, lines highlighted in magenta were scheduled to be cleaned during the removal action but were not cleaned due to damage or accessibility problems. The thickness of the colored lines on the figure will be increased to make it easier to identify the status of each line.

Potential problems resulting from the inability to clean lines will be discussed in the remedial investigation and feasibility study (RI/FS) report for Operable Unit (OU) 4.

Comment 2: Sampling of the sediment in the catch basins yielded high levels of metals and various SVOCs. Information on the sources of these contaminants and the steps that have been taken to remove the sources, thus ensuring that the storm lines do not accumulate contaminated sediment in the future, must be included in the appropriate remedial investigation reports of each operable unit.

Response: Information on the sources of the contaminated sediments removed from the storm sewer system, and the actions taken to remove these sources, will be presented in the RI/FS report for OU 4.

Comment 3: The section on pg 24 that deals with conclusions and recommendation must also address the following items:

- a. The potential for contaminated groundwater to enter broken lines that are located beneath the water table must be determined, and the resulting impacts on ecological receptors in the Bay and to other receptors that ingest food from the Bay must be evaluated.

- b. The tendency of the material in which the storm lines are buried to act as a preferential pathway for the migration of contaminated groundwater must be evaluated.**

Response: a. The potential for contaminated groundwater to enter broken lines that are located beneath the water table will be addressed during a project scheduled to start in May 1998. The following tasks will be performed:

- Review existing data and identify storm sewers having possible groundwater infiltration within contaminated plumes and provide an assessment of the condition of the lines.
- Perform additional field work necessary to determine groundwater infiltration and to assess the condition of the lines.
- Prepare a study report describing findings and any field work performed, identifying the specific drain lines affected by groundwater infiltration, and recommend corrective actions.
- Prepare a design/work plan for repairing the storm sewer system based on recommendations of the study.
- Repair the affected storm sewer lines.

Ecological risks to aquatic receptors in San Francisco Bay will be evaluated in an ecological risk assessment to be conducted for OU 4. Sediment samples have been collected in aquatic environments at the storm water outfalls emptying into the Oakland Inner Harbor, Western Bayside, Seaplane Lagoon, Breakwater Beach, and Piers 1 and 2. These data have been submitted to the regulatory agencies for review. Currently, the Navy is working with the regulatory agencies to develop a technical approach for the ecological risk assessment of the aquatic areas.

- b. The tendency of the fill material in which the storm lines are buried to act as a preferential pathway for the migration of contaminated groundwater is being investigated by the Navy. Soil samples were collected from the fill material surrounding the storm sewer and industrial waste sewer lines across the base. The analytical data for this sampling event will be presented in a report that is forthcoming. Additional evaluation of the data, conclusions, and recommendations presented in the Navy's report will be discussed in the OU 4 RI/FS report.

The Conclusions and Recommendations section (Section 6.0) of the Site 18 Removal Action Close-out Report will be revised with the above information.

**RESPONSE TO THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY,
DEPARTMENT OF TOXIC SUBSTANCES CONTROL'S COMMENTS
ON THE DRAFT SITE 18 STORM SEWER SYSTEM
SOLIDS AND DEBRIS REMOVAL ACTION CLOSEOUT REPORT
FOR NAVAL AIR STATION ALAMEDA**

This document presents the Navy's responses to comments from the California Environmental Protection Agency, Department of Toxic Substances Control, dated January 30, 1998, on the Draft Site 18 Storm Sewer System Solids and Debris Removal Action Close-out Report for Naval Air Station Alameda, dated December 1997.

General Comment

Comment: This report demonstrates that, although the Navy has significantly mitigated the threat to the environment posed by the storm sewer system, there are still issues that need to be addressed, namely (1) what has been done to eliminate ongoing discharge of contaminated sediment and debris to the system, and (2) how the Navy plans to evaluate the impact of contaminated groundwater infiltration into the system. These issues should be addressed promptly by the BRAC Cleanup Team.

- Response:**
1. Information on the sources of the contaminated sediments removed from the storm sewer system, and the actions taken to remove these sources, will be presented in the remedial investigation and feasibility study (RI/FS) report for Operable Unit (OU) 4.
 2. The potential for contaminated groundwater to enter broken lines that are located beneath the water table will be addressed during a project scheduled to start in May 1998. The following tasks will be performed:
 - Review all existing information and data and identify storm sewer lines having possible groundwater infiltration within contaminated plumes and provide an assessment of the condition of the lines.
 - Prepare a work plan for additional field work necessary to determine groundwater infiltration and to assess the condition of the lines.
 - Prepare a study report describing findings and any field work performed, identifying the specific drain lines affected by groundwater infiltration, and recommend corrective actions.
 - Prepare a design/work plan for repairing the storm sewer system based on recommendations of the study.
 - Repair the affected storm sewer lines.

The Conclusions and Recommendations section (Section 6.0) of the Site 18 Removal Action Close-out Report have been revised with the above information.