

PUBLIC MEETING AGENDA

**FINAL PROPOSED PLAN
TANKS 53 AND 56 AT TANK FARM FIVE**

**NAVAL EDUCATION AND TRAINING CENTER
NEWPORT, RHODE ISLAND**

Monday, June 22, 1992

7:30 p.m.

*Gaudet Middle School Cafeterium
Aquidneck Avenue, Middletown, Rhode Island*

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| <i>1. Opening Remarks and
Introductions</i> | <i>Captain Pringle, CEC, USN
Director for Public Works
Naval Education and Training Center</i> |
| <i>2. Regulatory Overview</i> | <i>Francisco A. LaGreca
Remedial Program Manager
U.S. Navy, Northern Division</i> |
| <i>3. Site History and Project
Overview</i> | <i>Robert C. Smith
TRC Environmental Consultants, Inc.</i> |
| <i>4. Site Investigations</i> | <i>James Peronto
TRC Environmental Consultants, Inc.</i> |
| <i>5. Remedial Alternatives</i> | <i>Jean M. Oliva
TRC Environmental Consultants, Inc.</i> |
| <i>6. Proposed Plan</i> | <i>Francisco A. LaGreca</i> |
| <i>7. United States Environmental
Protection Agency - Region I</i> | <i>Carol Keating
Remedial Program Manager, USEPA</i> |
| <i>8. Rhode Island Department
of Environmental Management</i> | <i>Paul Kulpa
Project Manager, RIDEM</i> |
| <i>9. Questions and Answers</i> | <i>Francisco A. LaGreca</i> |
| <i>10. BREAK</i> | <i>Captain Pringle</i> |
| <i>11. Public Hearing for the
Record</i> | <i>Captain Pringle</i> |
| <i>12. Closing Remarks</i> | <i>Captain Pringle</i> |

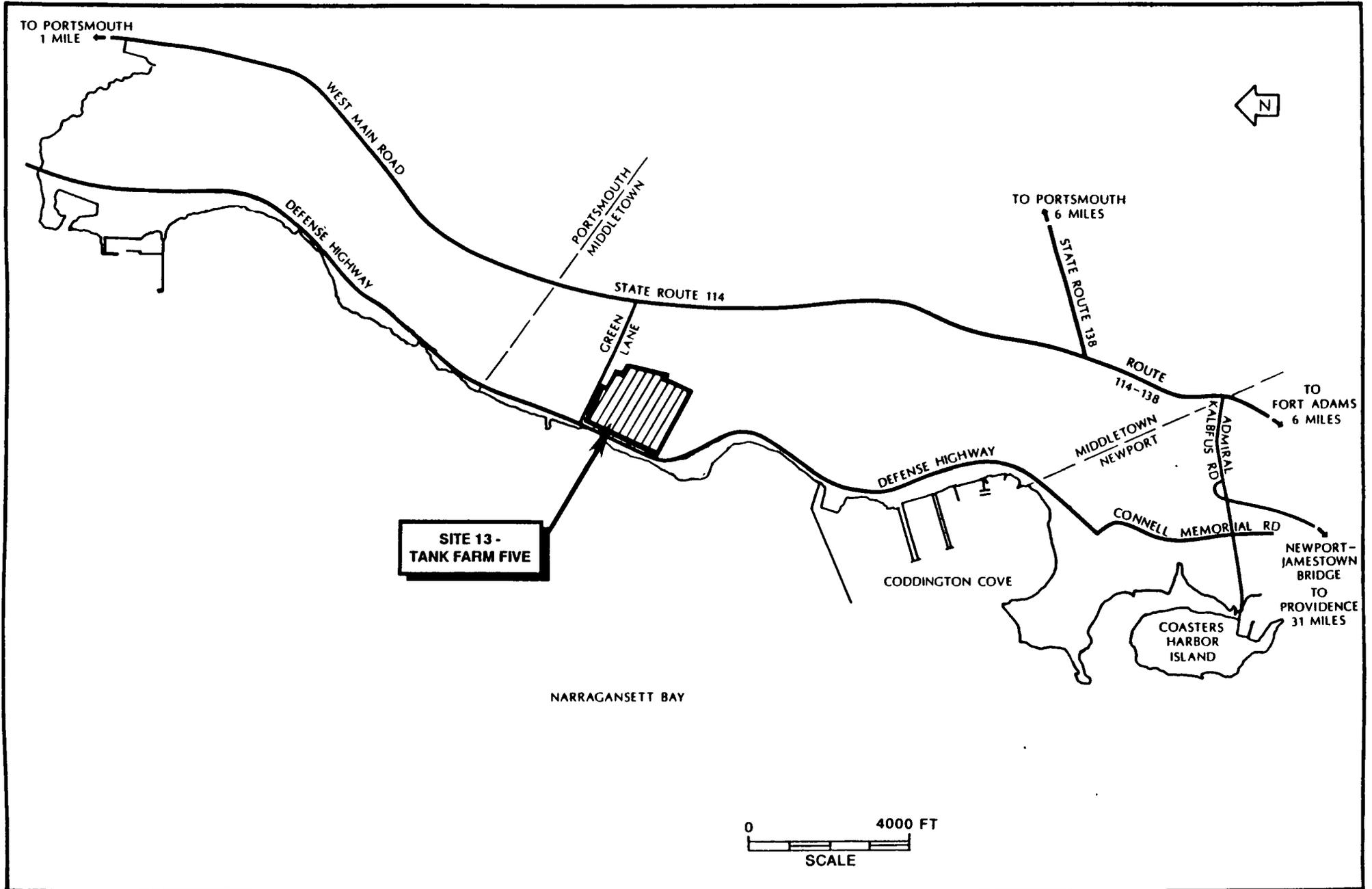
FINAL PROPOSED PLAN
Tanks 53 and 56 at Tank Farm 5

Naval Education and Training Center
Newport, Rhode Island

Overview

- **Purpose of the Public Meeting**
 - **Establish communications between Navy, concerned individuals, local residents, state and local officials**
 - **Keep the public informed of on-going actions**
 - **Obtain public input and involvement**
- **Written comment period from June 10 through July 10, 1992**

NETC Site Location Map



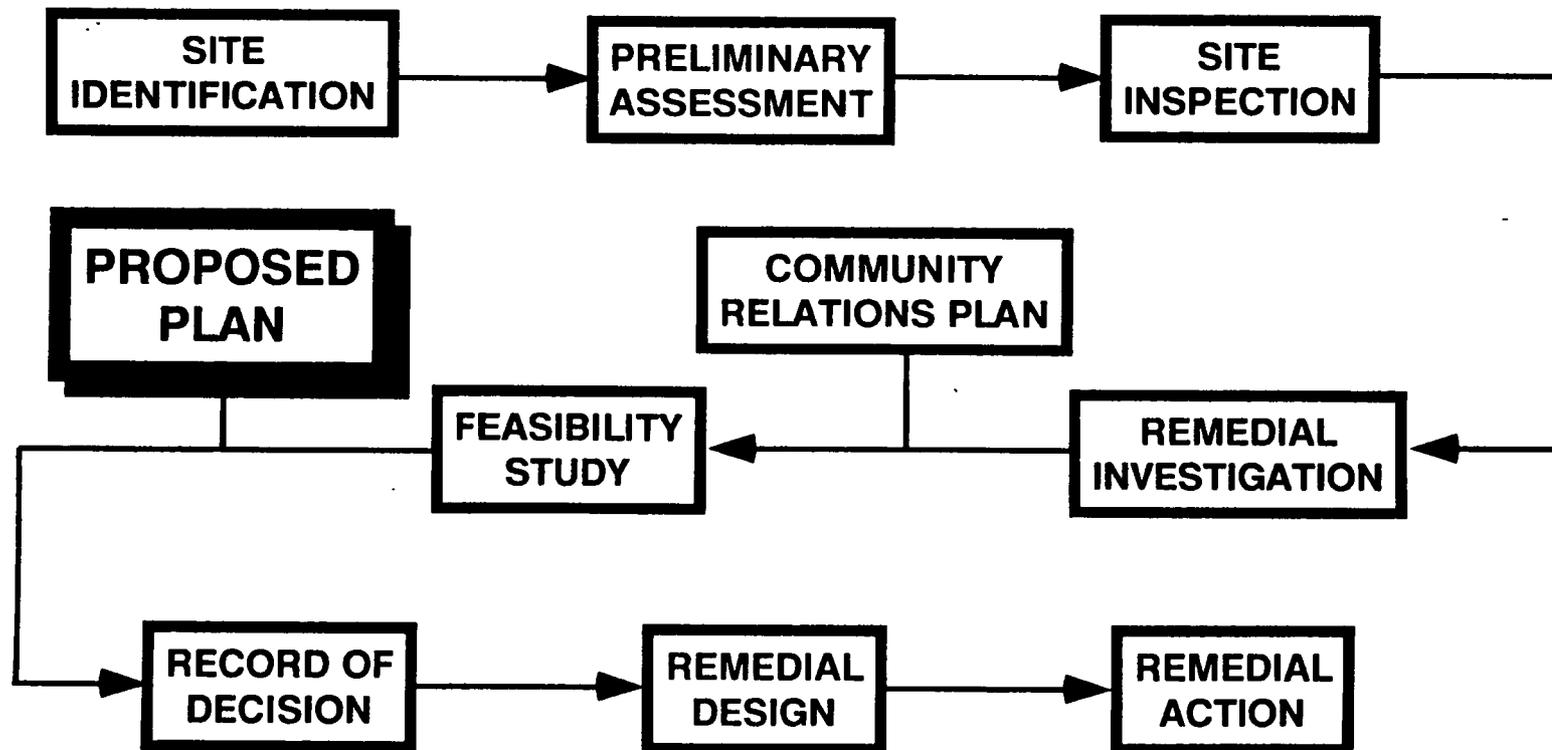
Regulatory Overview

- **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**
- **Superfund Amendments and Reauthorization Act (SARA)**
- **Resource Conservation and Recovery Act (RCRA)**
- **National Priorities List (NPL)**
- **Federal Facilities Agreement (FFA)**

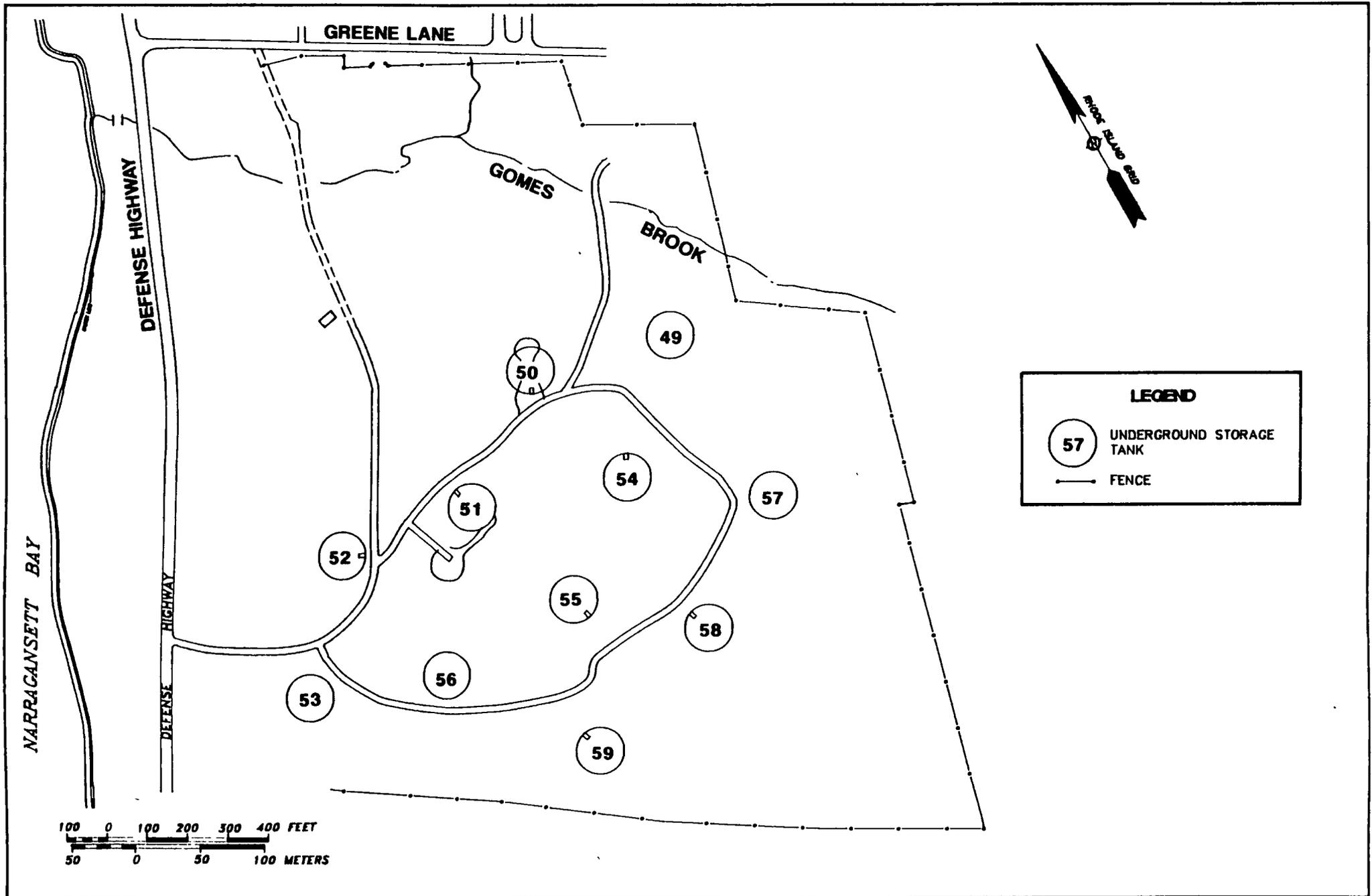
Installation Restoration Program

- **Identification of site**
- **Confirmation of hazardous materials**
- **Type and extent of contamination**
- **Evaluation of cleanup alternatives**
- **Proposed cleanup remedy**
- **Selection of remedy**
- **Implementation of cleanup remedy**

Navy's Installation Restoration Program



Site Map



Site History and Background

- **Tank Farm Five constructed early 1940's**
- **85-acre tank farm**
- **Eleven 2.52 million gallon concrete underground storage tanks**
- **Tanks 53 and 56 contained waste oil (1975-1982)**
- **Tank oil and sludge determined to be hazardous**
- **Oil release at Tank 53 observed (1990)**
- **Tanks to be closed in accordance with federal and state requirements**

Previous Tank Cleanup Activities

- **Removed tank oil and sludge to off-site facility**
- **Treated tank water on-site**
- **Steam-cleaned tank interior**
- **Conducted testing to verify cleanup**
- **Ring drain water pumped to reduce hydrostatic pressure**

Field Investigation Goals

- **Characterize the site**
- **Characterize type(s) of contamination**
- **Determine extent of contamination**
- **Identify contaminant migration routes and receptors**
- **Characterize potential human health risks and environmental impacts**

Field Investigation Program Summary

- **Tank contents sampling**
 - **Soil gas survey**
 - **Surface soil sampling**
 - **Soil borings**
 - **Ground water monitoring wells/sampling**
 - **Surface water/sediment sampling**
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Investigation Findings

SURFACE SOILS

- Petroleum hydrocarbons
- Lead

SUBSURFACE SOILS

- Petroleum hydrocarbons
- Base neutral/acid extractable organic compounds

Investigation Findings

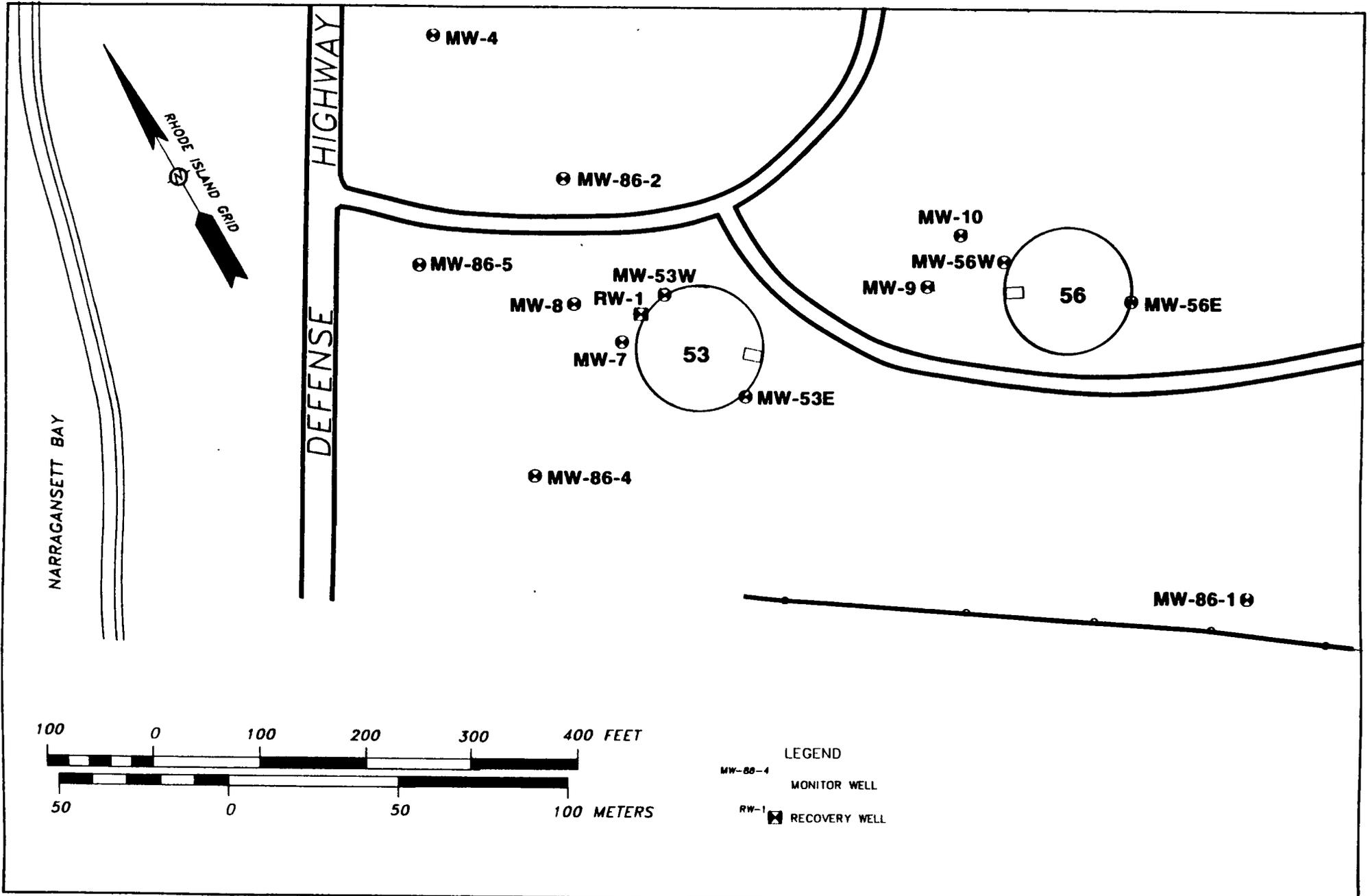
GROUND WATER

- Floating oil product at Tank 53
- Volatile organic compounds (chlorinated and aromatic hydrocarbons)
- Base neutral/acid extractable organic compounds
- Metals

TANK OIL

- Chlorinated and aromatic hydrocarbons
- Base neutral/acid extractable organic compounds
- Metals

Tanks 53 and 56 Area Map



Human Health Risk Assessment

- **GROUND WATER CONTAMINATION**
No current exposures
- **SOIL CONTAMINATION**
Potential exposures
 - **Children trespassing**
 - **Site workers (Fire Fighting Training Center)**
Risks do not exceed EPA's risk range
- **ADDITIONAL RISK EVALUATION IN PHASE II**
- **ECOLOGICAL ASSESSMENT IN PHASE II**

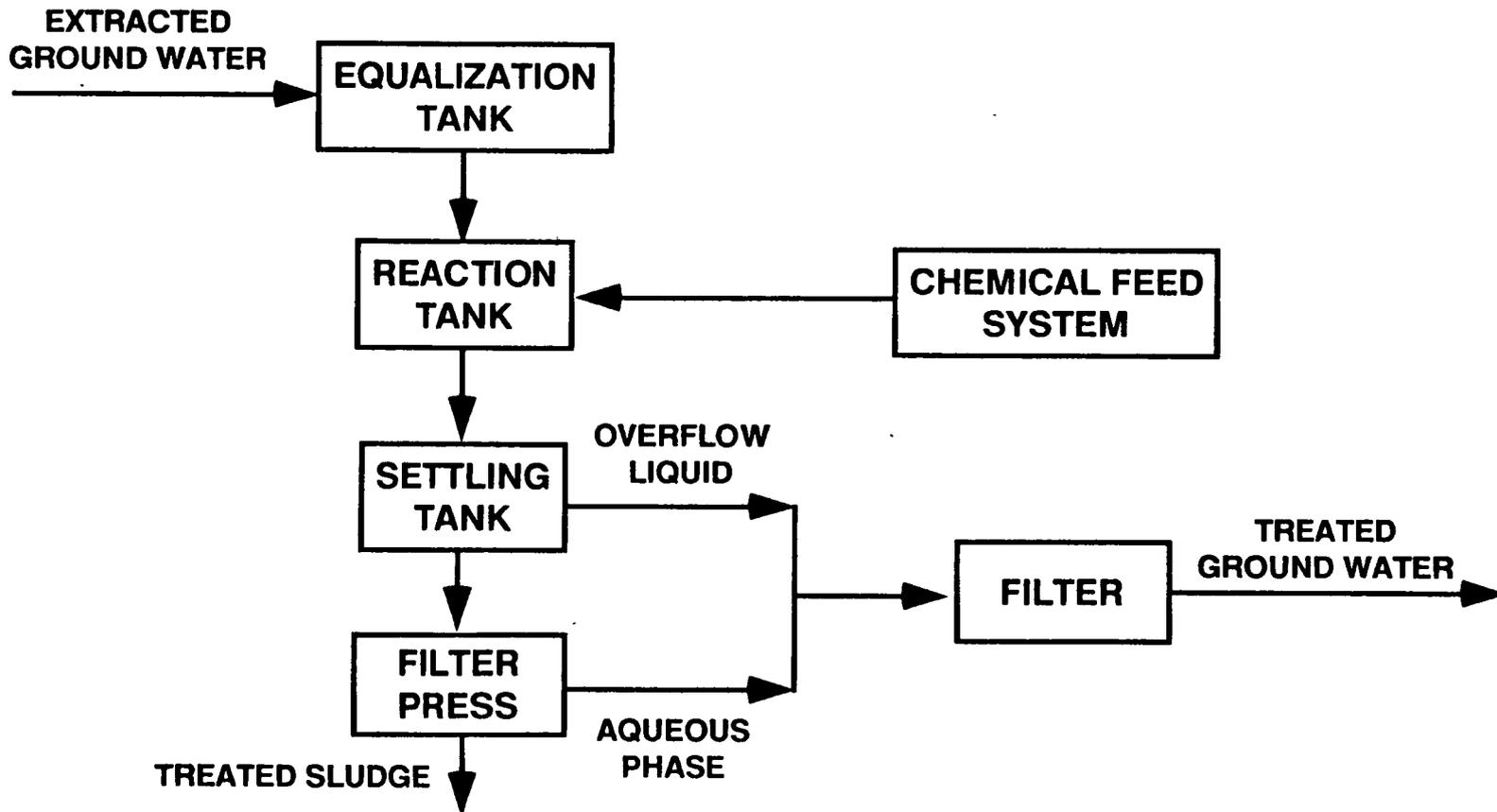
Remedial Action Objectives

- **Minimize migration of contaminated ground water**
- **Minimize discharge of contaminated ground water to on-site brook and Narragansett Bay**
- **Reduce potential risk related to any future ingestion of contaminated ground water**
- **Reduce time required for ground water restoration**

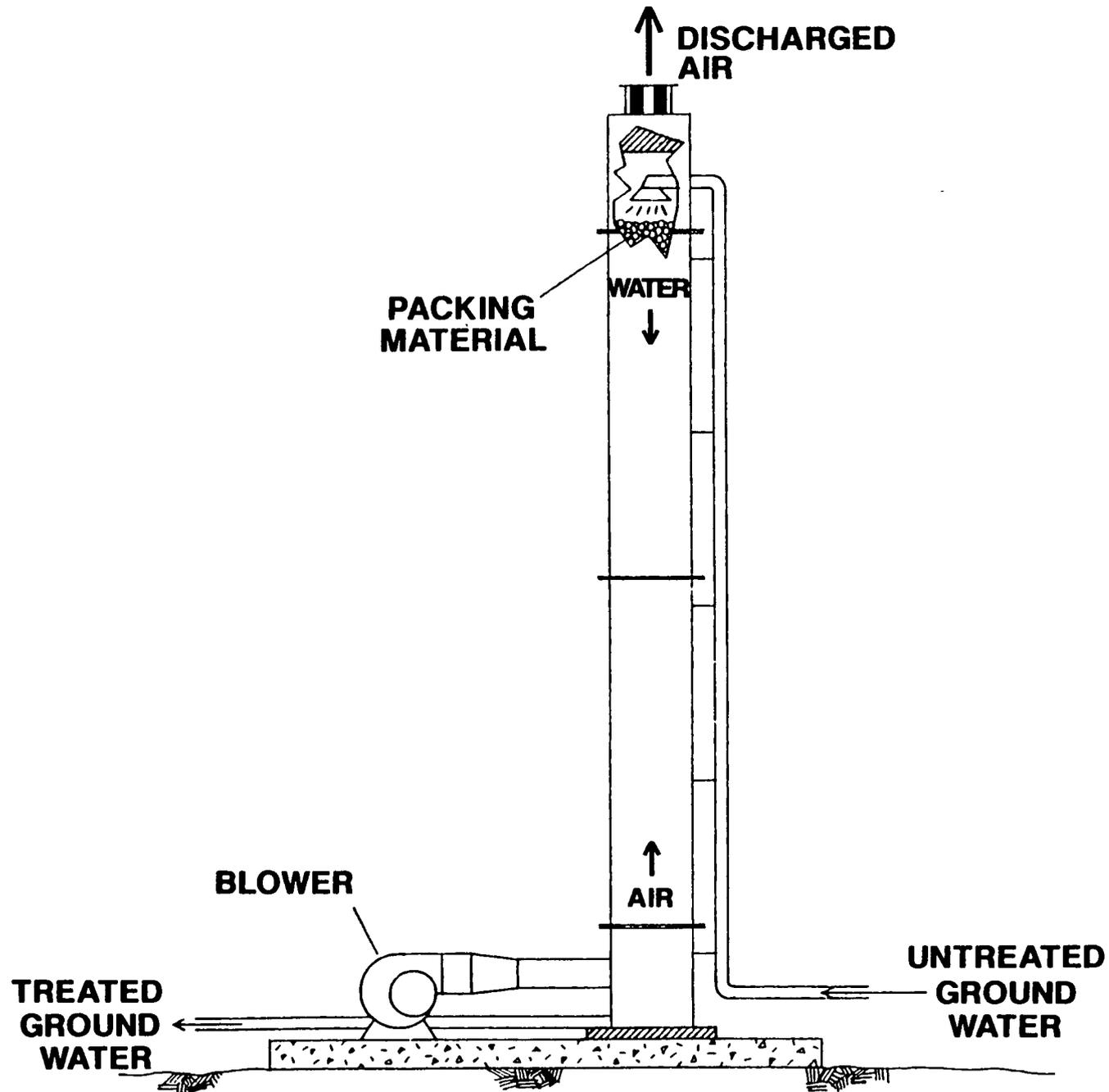
Remedial Alternatives Ground Water

- **Ground water extraction with on-site treatment and discharge to local wastewater facility**
 - **Air stripping and coagulation/filtration**
 - **Ultraviolet (UV) oxidation and coagulation/filtration**
- **Ground water extraction with on-site treatment and ground water recharge**
- **Ground water extraction with on-site treatment and discharge to surface water**

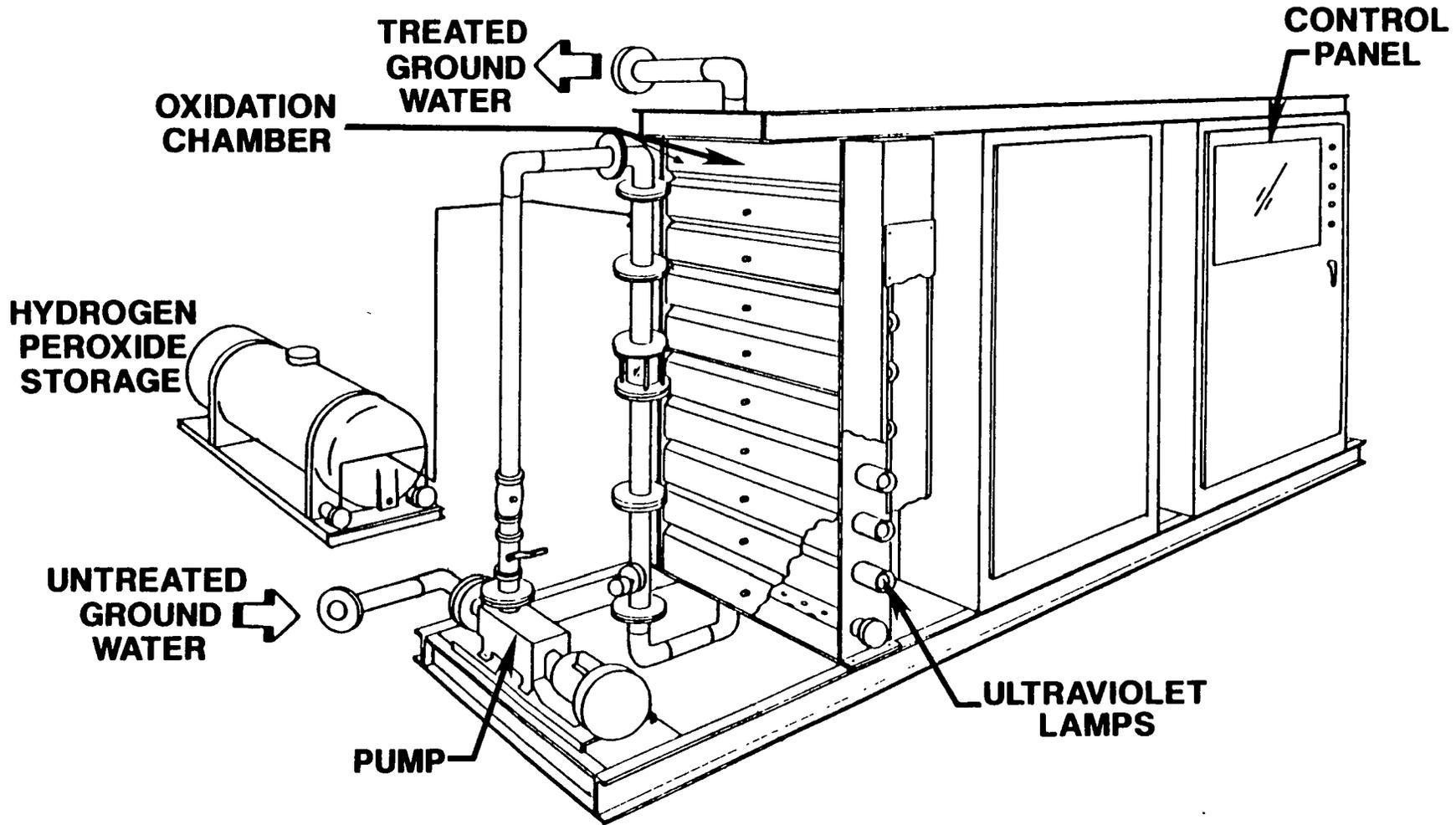
Coagulation/Filtration Treatment System



Air Stripping Treatment System



Ultraviolet Oxidation Treatment System



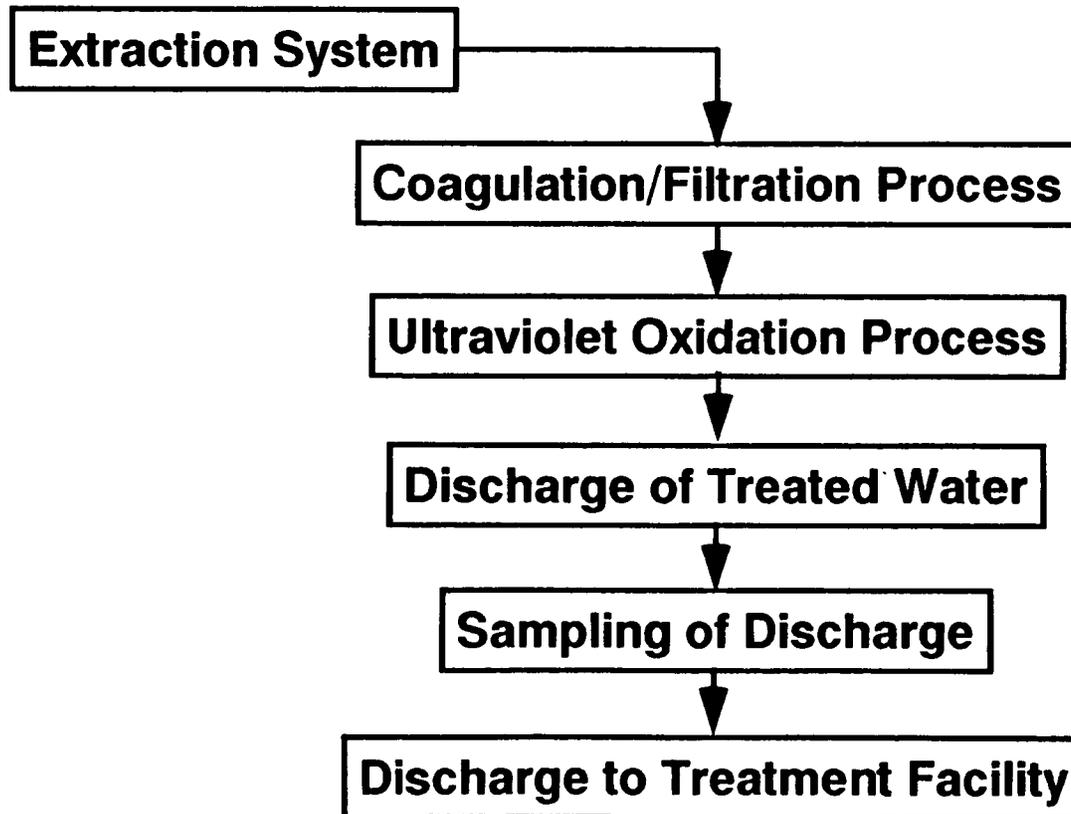
Criteria Used to Select Remedy

- **Protection of human health and the environment**
- **Compliance with applicable or relevant and appropriate requirements**
- **Long-term effectiveness and permanence**
- **Reduction of toxicity, mobility, or volume through treatment**
- **Short-term effectiveness**
- **Implementability**
- **Cost**
- **State acceptance**
- **Community acceptance**

Interim Remedial Action Proposed Remedy

- **Ground water extraction with on-site treatment and discharge to local wastewater facility**
- **Treatment option: ultraviolet (UV) oxidation and coagulation/filtration**

Treatment System



Future Work Tanks 53 and 56

- **Determine horizontal/vertical extent of contamination**
- **Remediate soil contamination**
- **Complete tank closure (tank demolition and backfilling)**

Future Work Tank Farm Five

- **Phase II Remedial Investigation**
- **Human Health and Ecological Risk Assessment**
- **Feasibility Study**
- **Evaluate performance of interim remedial action**
- **Site remediation - Proposed Plan**