

# Department of the Navy Environmental Restoration

## Strong Environmental Partners: Our Community, Our Navy



Report for Fiscal Years 2004-2008



# Foreword

The Department of the Navy (DON) has more than 200 installations located throughout the United States. Many of these have been in operation continuously for more than fifty years. The DON strives to be a responsible steward of these lands and to maintain them in a way that both protects human health and the environment and allows training and support of fleet readiness.

Over the past 18 years, the DON's Installation Restoration Program has made great strides toward cleanup of contamination from past operations, having completed response actions at 3,457 out of 4,715 BRAC and ER,N funded sites as of the end of Fiscal Year (FY) 2003. More recently, the DON recognized the need for cleanup at closed military ranges and initiated the Munitions Response Program so that these lands can be safely reused.

Developing effective and efficient solutions to environmental problems requires the cooperation of many parties. The DON recognizes the importance of forming partnerships to solve these complex problems. The DON works to develop and improve partnerships with the communities in which its installations are located, the federal regulatory agencies such as U.S. Environmental Protection Agency, state regulatory agencies, and within the military services. Developing partnerships with the communities and regulators early in a project is often key to developing a solution that is acceptable to all parties. Partnerships within the military services promote the sharing of lessons learned and transfer of technologies. Successes achieved through these partnering efforts are described in this Five Year Plan.

This report highlights the successes and accomplishments achieved during FY 2003 and presents our vision for the next five years (FY 2004 – FY 2008) for the Installation Restoration Program and Munitions Response Program. Chapter 5 includes quick-reference summaries for each installation. Additional information is available at <http://5yrplan.nfesc.navy.mil>.

As the Installation Restoration Program moves toward its goal of completing all restoration sites by FY 2014 and as the Munitions Response Program continues to develop and expand, both programs remain committed to protecting human health and the environment, providing safe places for our military and civilian personnel to live and work, and remaining good neighbors to the surrounding communities. We welcome and encourage your interest in our ongoing cleanup projects.

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and Munitions Response Programs  
Office of the Chief of Naval Operations



# Comments

The Department of the Navy recognizes that cleaning up the nation's past hazardous waste disposal sites is a collaborative partnership that touches not only our Navy and Marine Corps personnel, but also those who live and work in nearby communities. We encourage all comments on the DON Environmental Restoration Plan for Fiscal Years 2004 – 2008. Please mail your comments to the address below, submitting as many pages as necessary. Our goal is to make this plan user friendly and responsive to your needs. Your input is greatly appreciated.

Please take a moment to fill in the following comments page, attaching additional pages if necessary, and return it to:

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Chief of Naval Operations (N45)

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Comments: \_\_\_\_\_  
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*This full document is available on the web for review or download in .pdf format. Please visit <http://5yrplan.nfesc.navy.mil>.*



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# Acronym List

ABL	Allegany Ballistics Laboratory
ADEQ	Arizona Department of Environmental Quality
AOC	Administrative Order of Consent
AR	Administrative Record
ARAR	Applicable or Relevant and Appropriate Requirement
ARMS	Administrative Record Management System
ARTT	Alternative Restoration Technology Team
ASTM	American Society for Testing and Materials
AVGAS	aviation gasoline
AWI	Atlantic Wood Industries
BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
BSO	Budget Submitting Office
CA	Cooperative Agreement
CADD	Computer-Aided Design and Drafting
CECOS	Civil Engineer Corps Officer School
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (of 1980)
CIPP	cured-in-place pipe
CLEAN	Comprehensive Long-Term Environmental Action Navy
CNO	Chief of Naval Operations
CNRMA	Commander Navy Region Mid-Atlantic
COC	contaminant of concern
CLSM	controlled-low strength material
CRA	Camel Refurbishing Area
CSM	conceptual site model
CT	carbon tetrachloride
CTC	cost-to-complete

*Acronym List, continued*

CVOC	chlorinated volatile organic compound
DCE	dichloroethylene
DERP	Defense Environmental Restoration Program
DIRT	Dahlgren Installation Restoration Team
DMM	discarded military munitions
DMS	Document Management System
DNAPL	dense, nonaqueous-phase liquid
DoD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
DON	Department of the Navy
DPG	Defense Planning Guidance
DSMOA	Defense and State Memorandum of Agreement
DTSC	(California) Department of Toxic Substances Control
EBS	Environmental Baseline Survey
EBST	Environmental Baseline Survey for Transfer
EE/CA	Engineering Evaluation/Cost Analysis
EETP	Eastern Early Transfer Parcel
EGIS	Environmental Geographic Information System
EFA	Engineering Field Activity
EFA CHES	Engineering Field Activity Chesapeake
EFA NW	Engineering Field Activity Northwest
EFA WEST	Engineering Field Activity West
EFD	Engineering Field Division
EFD/A	Engineering Field Division/Activity
EMAC	Environmental Multiple Award Contract
EPA	U.S. Environmental Protection Agency
ER,N	Environmental Restoration, Navy
ESCA	Environmental Services Cooperative Agreement
ESTCP	Environmental Security Technology Certification Program
FDEP	Florida Department of Environmental Protection
FFSRA	Federal Facility Site Remediation Agreement
FOSET	Finding of Suitability for Early Transfer
FOST	Finding of Suitability for Transfer



FS	Feasibility Study
FTP	File Transfer Protocol
FUDS	Formerly Utilized Defense Site
FY	Fiscal Year
GAC	granular activated carbon
GIS	Geographic Information System
GOCO	Government Owned Contractor Operated
HAZWOPER	Hazardous Waste Facility Operations and Emergency Response
HDOH	State of Hawaii Department of Health
HHRA	human health risk assessment
HPS	Hunters Point Shipyard
HRS	Hazard Ranking System
HSSA	Hazardous Substance Storage Area
IC	Institutional Control
IHIRT	Indian Head Installation Restoration Team
IR	Installation Restoration
IRA	Interim Remedial Action
IRGIS	Installation Restoration Geographic Information System
IRP	Installation Restoration Program
IRRM	Installation Restoration Records Management
IRZ	in situ reactive zone
ISEERB	Interservice Environmental Education Review Board
ITRC	Interstate Technology Regulatory Council
JARA	Joint Approach Response Action
JPHC	Jackson Park Housing Complex
KBCRS	Knowledge Based Corporate Reporting System
LEPA	Leading Edge Plume Area
LF	linear feet
LTM	Long-Term Monitoring
LTMgt	Long-Term Management
MARAD	Maritime Administration (U.S. Department of Transportation)
MC	munitions constituents
MCAS	Marine Corps Air Station
MCL	Maximum Contaminant Level
MCLB	Marine Corps Logistics Base

*Acronym List, continued*

MDE	Maryland Department of the Environment
MEC	Munitions and Explosives of Concern
MNA	monitored natural attenuation
MPE	multiphase extraction
MR	Munitions Response
MRC	Munitions Response Committee
MRP	Munitions Response Program
NAD	Naval Ammunition Depot
NAF	Naval Air Facility
NARL	Naval Arctic Research Laboratory
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
NAWC	Naval Air Warfare Center
NAWS	Naval Air Weapons Station
NCBC	Naval Construction Battalion Center
NCTS	Naval Computer and Telecommunications Station
NEHC	Navy Environmental Health Center
NFESC	Naval Facilities Engineering Service Center
NHB	Naval Hospital Bremerton
NIRIS	Naval Installation Restoration Information Solution
NLPCB	non-liquid polychlorinated biphenyl
NNSY	Norfolk Naval Shipyard
NOSSA	Navy Ordnance Safety and Security Activity
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRI	natural resource injury
NSWC	Naval Surface Warfare Center
NTC	Naval Training Center
NWIRP	Naval Weapons Industrial Reserve Plant
NWS	Naval Weapons Station
O&M	operations and maintenance
OEPA	Ohio Environmental Protection Agency
ONR	Office of Naval Research
OSD	Office of the Secretary of Defense
OSWER	(EPA) Office of Solid Waste and Emergency Response



OU	Operable Unit
P&T	pump and treat
PA	Preliminary Assessment
PACDIV	Pacific Division
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	perchloroethylene
PDB	passive diffusion bag
PHNC	Pearl Harbor Naval Complex
POM	Program Objective Memorandum
PP	Proposed Plan
ppb	parts per billion
PRB	permeable reactive barrier
PRL	potential release locations
QA/QC	quality assurance/quality control
R&D	research and development
RA	Remedial Action
RAB	Restoration Advisory Boards
RAC	Remedial Action Construction
RAO	Remedial Action Operation
RAW	Risk Assessment Work Group
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
RITS	Remediation Innovative Technology Seminar
ROD	Record of Decision
ROICC	Resident Officer in Charge of Construction
RPM	remedial project manager
RTET	Remediation Technology Evaluation Tool
RTM	remedial technical manager
RWQCB	Regional Water Quality Control Board
SA	Study Area

*Acronym List, continued*

SARA	Superfund Amendments and Reauthorization Act (of 1986)
SSC	SPAWAR Systems Center
SCO	Site Close Out
SDS	Spatial Data Standards
SERDP	Strategic Environmental Research and Development Program
SI	Site Inspection
SIVE	steam injection/vapor extraction
SOUTHDIV	Southern Division
SOW	Statement of Work
SPAWAR	Space and Naval Warfare Systems Command
SVOC	semivolatile organic compound
SWDIV	Southwest Division
T2	technology transfer
TAPP	Technical Assistance for Public Participation
TCA	trichloroethane
TCE	trichloroethene
TDEM	Time Domain Electromagnetic
TEAP	terminal electron accepting process
TIE	Toxicity Identification Evaluation
TRC	Technical Review Committee
TtNUS	Tetra Tech NUS, Inc.
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UV	ultraviolet
UXO	unexploded ordnance
VC	vinyl chloride
VCT	vertical circulation treatment
VDEQ	Virginia Department of Environmental Quality
VOC	volatile organic compound
WCSD	Watershed Contaminated Source Document
WEPT	Western Early Transfer Parcel
WVDEP	West Virginia Department of Environmental Protection
ZVI	zero-valent iron