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# Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command Pearl Harbor, Hawaii

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ENVIRONMENTAL BASELINE SURVEY  
SHIP REPAIR FACILITY  
INLAND AND WATERFRONT AREAS  
GUAM, MARIANA ISLANDS

Prepared for:

Pacific Division  
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September 1996

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## TABLE OF CONTENTS

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<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
a	LIST OF ACRONYMS	a-1
ES	EXECUTIVE SUMMARY	ES-1
1	INTRODUCTION	1-1
1.1	Purpose of the Environmental Baseline Survey	1-1
1.2	Parcel Identification	1-2
2	METHODOLOGY	2-1
2.1	Document Review	2-1
2.2	Regulatory Agency Contacts and Records Review	2-2
2.3	Aerial Photograph Evaluation	2-3
2.4	Physical Reconnaissance	2-3
2.5	Personnel Interviews	2-5
2.6	Title Search	2-5
2.7	EBS Reporting	2-6
3	ENVIRONMENTAL SETTING	3-1
3.1	Physiography	3-1
3.2	Climatology	3-3
3.3	Geology	3-5
3.3.1	Regional Geology	3-5
3.3.1.1	Artificial Fill	3-6
3.3.1.2	Quaternary Alluvium	3-6
3.3.1.3	Beach Deposits	3-6

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
3.3.1.4	Mariana Limestone	3-7
3.3.1.5	Barrigada Formation	3-7
3.3.1.6	Alifan Formation	3-8
3.3.1.7	Umatac Formation	3-8
3.3.1.8	Alutom Formation	3-9
3.3.1.9	Regional Soils	3-9
3.3.2	Site Geology	3-10
3.4	Water Resources	3-15
3.4.1	Hydrogeology	3-15
3.4.2	Surface Water Hydrology	3-17
3.4.2.1	Surface Water Occurrence	3-17
3.4.2.2	Surface Water Quality	3-19
3.4.3	Potable Water Supply	3-20
3.4.3.1	Potable Water Supply Sources	3-20
3.4.3.2	Potable Water Supply Quality	3-21
3.5	Natural Resources	3-22
3.5.1	Flora	3-22
3.5.1.1	Limestone Forest	3-22
3.5.1.2	Leucaena Scrub	3-22
3.5.1.3	Freshwater Marsh	3-24
3.5.1.4	Mangrove Swamps	3-24
3.5.1.5	Hibiscus Swamp	3-25
3.5.1.6	Casuarina Forest	3-25
3.5.1.7	Disturbed Grassland	3-25
3.5.1.8	Disturbed Habitat	3-25
3.5.1.9	Agricultural Habitat	3-26
3.5.1.10	Ruderal	3-26
3.5.2	Fauna	3-26

---

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
3.5.3	Apra Harbor	3-28
3.5.3.1	Patch Reefs	3-28
3.5.3.2	Soft Substrates	3-29
3.5.4	Sensitive Resources	3-29
3.6	Wildlife Refuges	3-30
3.7	Population	3-30
3.8	Cultural and Historical Resources	3-30
4	FINDINGS	4-1
4.1	SRF Main Areas, Inland	4-3
4.1.1	Past and Current Land Use	4-3
4.1.2	Areas of Concern	4-7
4.1.2.1	ASTs, USTs, and Pipelines	4-7
4.1.2.2	Asbestos	4-9
4.1.2.3	Hazardous Substances/Waste Management Areas	4-9
4.1.2.4	Lead-Based Paint	4-19
4.1.2.5	Medical/Biohazardous Waste	4-19
4.1.2.6	Ordnance	4-20
4.1.2.7	Pesticide Management	4-20
4.1.2.8	PCBs	4-20
4.1.2.9	Radon	4-20
4.1.2.10	Radioactive Material	4-21
4.1.2.11	Mixed Waste	4-21
4.1.2.12	Wastewater/Storm Water	4-21
4.1.2.13	Potable Water Contamination	4-21
4.1.2.14	Air Emissions	4-22
4.1.3	Cultural or Historical Resources	4-22
4.1.4	Adjacent Properties	4-22

---

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
4.1.5	Summary and Site Categorization	4-23
4.2	SRF Main Areas, Waterfront	4-25
4.2.1	Past and Current Land Use	4-25
4.2.2	Areas of Concern	4-32
4.2.2.1	ASTs, USTs, and Pipelines	4-32
4.2.2.2	Asbestos	4-35
4.2.2.3	Hazardous Substances/Waste Management Areas	4-35
4.2.2.4	Lead-Based Paint	4-45
4.2.2.5	Medical/Biohazardous Waste	4-45
4.2.2.6	Ordnance	4-45
4.2.2.7	Pesticide Management	4-45
4.2.2.8	PCBs	4-45
4.2.2.9	Radon	4-46
4.2.2.10	Radioactive Material	4-47
4.2.2.11	Mixed Waste	4-48
4.2.2.12	Wastewater/Storm Water	4-48
4.2.2.13	Potable Water Contamination	4-49
4.2.2.14	Air Emissions	4-49
4.2.3	Cultural or Historical Resources	4-49
4.2.4	Adjacent Properties	4-53
4.2.5	Summary and Site Categorization	4-53
5	REGULATORY COMPLIANCE STATUS	5-1
5.1	ASTs, USTs, and Pipelines	5-1
5.1.1	Regulatory Overview	5-1
5.1.2	Site-Specific Information	5-2
5.2	Asbestos	5-3
5.2.1	Regulatory Overview	5-3

---

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
5.2.2	Site-Specific Information	5-4
5.3	Hazardous Substances/Waste Management Areas	5-5
5.3.1	Regulatory Overview	5-5
5.3.2	Site-Specific Information	5-5
5.4	Lead-Based Paint	5-7
5.4.1	Regulatory Overview	5-7
5.4.2	Site-Specific Information	5-8
5.5	Pesticide Management	5-8
5.5.1	Regulatory Overview	5-8
5.5.2	Site-Specific Information	5-9
5.6	PCBs	5-9
5.6.1	Regulatory Overview	5-9
5.6.2	Site-Specific Information	5-9
5.7	Radon	5-10
5.7.1	Regulatory Overview	5-10
5.7.2	Site-Specific Information	5-10
5.8	Wastewater/Storm Water	5-11
5.8.1	Regulatory Overview	5-11
5.8.2	Site-Specific Information	5-11
5.9	Air Emissions	5-12
5.9.1	Regulatory Overview	5-12
5.9.2	Site-Specific Information	5-12
6	REFERENCES	6-1

## LIST OF FIGURES

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
ES-1	EBS Findings - SRF Inland Site	ES-3
ES-2	EBS Findings - Industrial Area, SRF Waterfront Site	ES-5
ES-3	EBS Findings - Drydock Island Area, SRF Waterfront Site	ES-7
1-1	SRF Sites	1-3
1-2	SRF Inland and Waterfront Sites	1-4
3-1	Physiographic Divisions	3-2
3-2	Approximate Distribution of Mean Annual Rainfall in Inches	3-4
3-3	General Soil Map	3-11
3-4	Surface Soil Map, SRF Inland Area	3-14
3-5	Surface Water Distribution - Southern Island	3-18
3-6	Wildlife Refuges	3-31
3-7	Municipalities of Guam	3-32
4-1	SRF Inland Site	4-4
4-2	SRF Inland Site, 1954	4-5
4-3	SRF Inland Site, 1995	4-5
4-4	Functional Areas - SRF Inland Site	4-12
4-5	EBS Findings - SRF Inland Site	4-24
4-6	SRF Waterfront Site	4-26
4-7	SRF Waterfront Site - Industrial Area Detail Map	4-27
4-8	Drydock Island Area - SRF Waterfront Site	4-29
4-9	Drydock Island Area - SRF Waterfront Site, 1964	4-33
4-10	View to North - Drydock Island Area - SRF Waterfront Site, 1995	4-33
4-11	EBS Findings - Industrial Area, SRF Waterfront Site	4-55
4-12	EBS Findings - Drydock Island Area - SRF Waterfront Site	4-56

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## LIST OF TABLES

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
3-1	Sensitive Species on Guam	3-23
3-2	Cultural and Historical Resources for SRF Waterfront Industrial Area	3-34
4-1	Potential Chemical Constituents of Materials Reported Deposited Within the SRF Inland Site	4-10
4-2	1995 Hazardous Waste Disposal Inventory, SRF Waterfront Industrial Area	4-39
4-3	1995 Hazardous Material List, SRF Waterfront Industrial Area	4-43
5-1	Summary of USTs and ASTs, SRF Facilities	5-3
5-2	Summary of Air Permits for the SRF Waterfront Industrial Area	5-13

## LIST OF APPENDICES

<u>LETTER</u>	<u>TITLE</u>	<u>PAGE</u>
A	Data Sources	A-1
	A-1 Documents	
	A-2 Maps	
	A-3 Aerial Photographs	
	A-4 Interviews	
B	Interview Transcripts	B-1
C	Site Reconnaissance Reports	C-1
D	Selected Biota of Guam	D-1

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## LIST OF ACRONYMS

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ACM	asbestos-containing material
AFDM	Auxiliary Floating Drydock Medium
AST	aboveground storage tank
AvGas	aviation gasoline
BCP	BRAC Cleanup Plan
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CB	Construction Battalion
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CLEAN	Comprehensive Long-Term Action Navy
COMNAVMAR	Commander U.S. Naval Forces Marianas
COPC	Chemical of Potential Concern
CPSC	Consumer Products Safety Commission
CTO	Contract Task Order
CWA	Clean Water Act
DAWR	Division of Aquatic and Wildlife Resources
DoD	Department of Defense
DoN	Department of the Navy
DPDO	Defense Property Disposal Office
DRMO	Defense Reutilization and Marketing Office
EBS	Environmental Baseline Survey
ECP	Environmental Condition of Property
°F	degrees Fahrenheit
FICP	U.S. Navy, Fleet Imaging Center, Pacific
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FISC	Fleet and Industrial Supply Center
FICP	U.S. Navy, Fleet Imaging Center, Pacific
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
GEPA	Guam Environmental Protection Agency
HABS	Historic American Building Survey
HUD	U.S. Department of Housing and Urban Development
IAS	Initial Assessment Study
IDW	Investigation Derived Waste
IR	Installation Restoration
kW	kilowatt
LCAC	Landing Craft Air Cushioned

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MARC	Micronesian Area Research Center, University of Guam
MCL	Maximum Contaminant Level
mgd	million gallons per day
MMBtu/ph	Million British thermal units per hour
MoGas	automotive gasoline
mph	miles per hour
msl	mean sea level
NAS	Naval Air Station
NAVACTS	Naval Activities
NAVFAC	Naval Facilities
NAVFACENGCOM	Naval Facilities Engineering Command
NAVHOSP	Naval Hospital
NAVMAG	Naval Magazine
NAVRAMP	Navy Radon Assessment and Mitigation Program
NCE	Non-contributing Element
NCTAMS	Naval Computer Telecommunication Area Master Station
NEESA	Naval Energy and Environmental Support Activity
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NNPP	Naval Nuclear Propulsion Program
NOB	Naval Operating Base
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NSY Pearl	Pearl Harbor Naval Shipyard
O&M	Operation and Maintenance
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PACNAVFACENGCOM	Pacific Division Naval Facilities Engineering Command
PAH	polyaromatic hydrocarbon
PCB	polychlorinated biphenyl
PCP	pentachlorophenol
POL	petroleum, oil, and lubricants
POTW	Publicly Owned Treatment Works
ppm	parts per million
PUAG	Public Utility Agency of Guam
PWC	Public Works Center
RCB	Reserve Craft Beach
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RQ	Reportable Quantities
SDWA	Safe Drinking Water Act
SI	Site Inspection
SPCC	Spill Prevention Control and Countermeasure

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SRF	Ship Repair Facility
SVOC	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TCLP	Toxic Characteristics Leachate Procedure
TEPH	Total Extractable Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
UNEV	Unevaluated
U.S.	United States
U.S.A.	United States of America
USC	U. S. Code
USCS	Unified Soil Classification System
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USN	United States Navy
UST	underground storage tank
VOC	volatile organic compound
WESTPAC	Western Pacific
Y&D	Yards and Docks
YFD	Yard Floating Dock

## EXECUTIVE SUMMARY

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An Environmental Baseline Survey (EBS) was performed for various parcels in Guam during November and December 1995. The purpose of the EBS was to comply with the Community Environmental Response Facilitation Act (CERFA) of 1992, PL 102-426, which amends the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. For this report, the evaluation of the Ship Repair Facility (SRF) was intended to identify current environmental conditions prior to the potential transfer of ownership or lease of equipment and/or land. The SRF property that was evaluated includes two sites: the SRF Inland site and the SRF Waterfront site (Industrial Area and Drydock Island).

This EBS was prepared in accordance with Department of Defense (DoD) policy, which states that the evaluation under CERFA will consider only available information. The following available information was consulted: reports, surveys, drawings, inspections, maps, and aerial photographs. In addition, Naval and regulatory agency personnel were interviewed and a physical reconnaissance of each site was conducted.

Based on the DoD *Base Realignment and Closure Cleanup Plan Guidebook*, a Base Realignment and Closure Cleanup Plan (BCP) will be prepared after the CERFA EBS process is complete (DoD 1995). The BCP is a management tool used for planning and executing environmental activities in response to the release of hazardous substances or petroleum products. The EBS uses seven Environmental Condition of Property (ECP) categories to identify the specific hazardous substance and/or petroleum concerns within the subject sites. The seven categories are defined under CERCLA, as follows:

- ECP Category 1 - Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration from adjacent areas).
- ECP Category 2 - Areas where only storage of hazardous substances or petroleum products has occurred but there has been no release, disposal, or migration from adjacent areas.

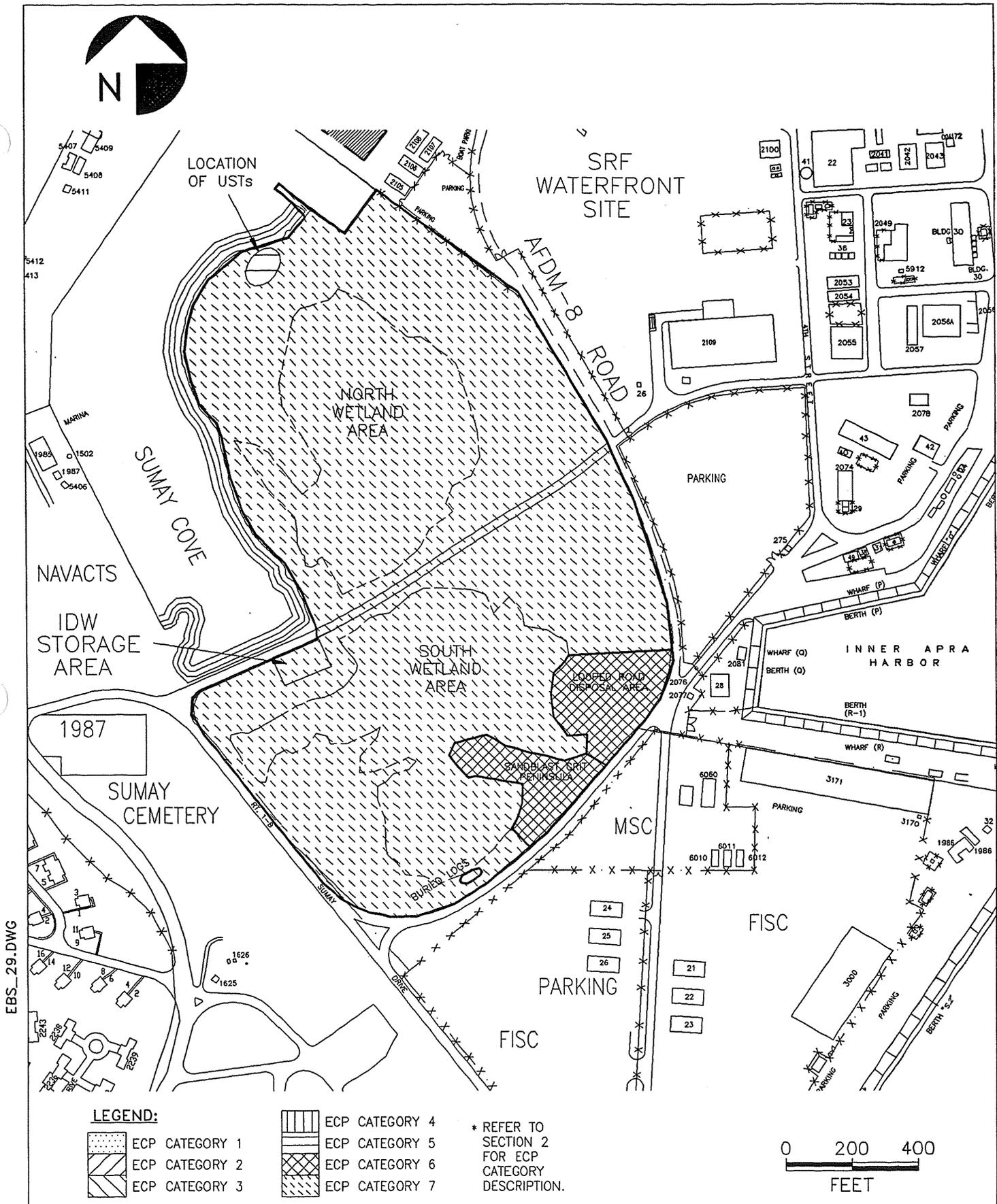
- ECP Category 3 - Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.
- ECP Category 4 - Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- ECP Category 5 - Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken.
- ECP Category 6 - Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.
- ECP Category 7 - Areas that are unevaluated or require additional evaluation.

### **Conclusions**

The ECP categories have been applied to the EBS subject sites, and are presented below. In addition, notification requirements are provided.

**Inland** - The SRF Inland site contains ECP Category 5, 6 and 7 areas. The SRF Inland site is an Installation Restoration (IR) site. Figure ES-1 illustrates the ECP categorization of the site.

The land on which the underground storage tanks (USTs) reside qualifies as ECP Category 5 because storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are underway, but all required remedial actions have not been taken. The contents of the USTs have been removed (Appendix C).



Source: PWC General Development Map (1995) Sheets 6,7,11, and 12.

EBS Findings – SRF Inland Site  
SRF, Guam

FIGURE

ES-1

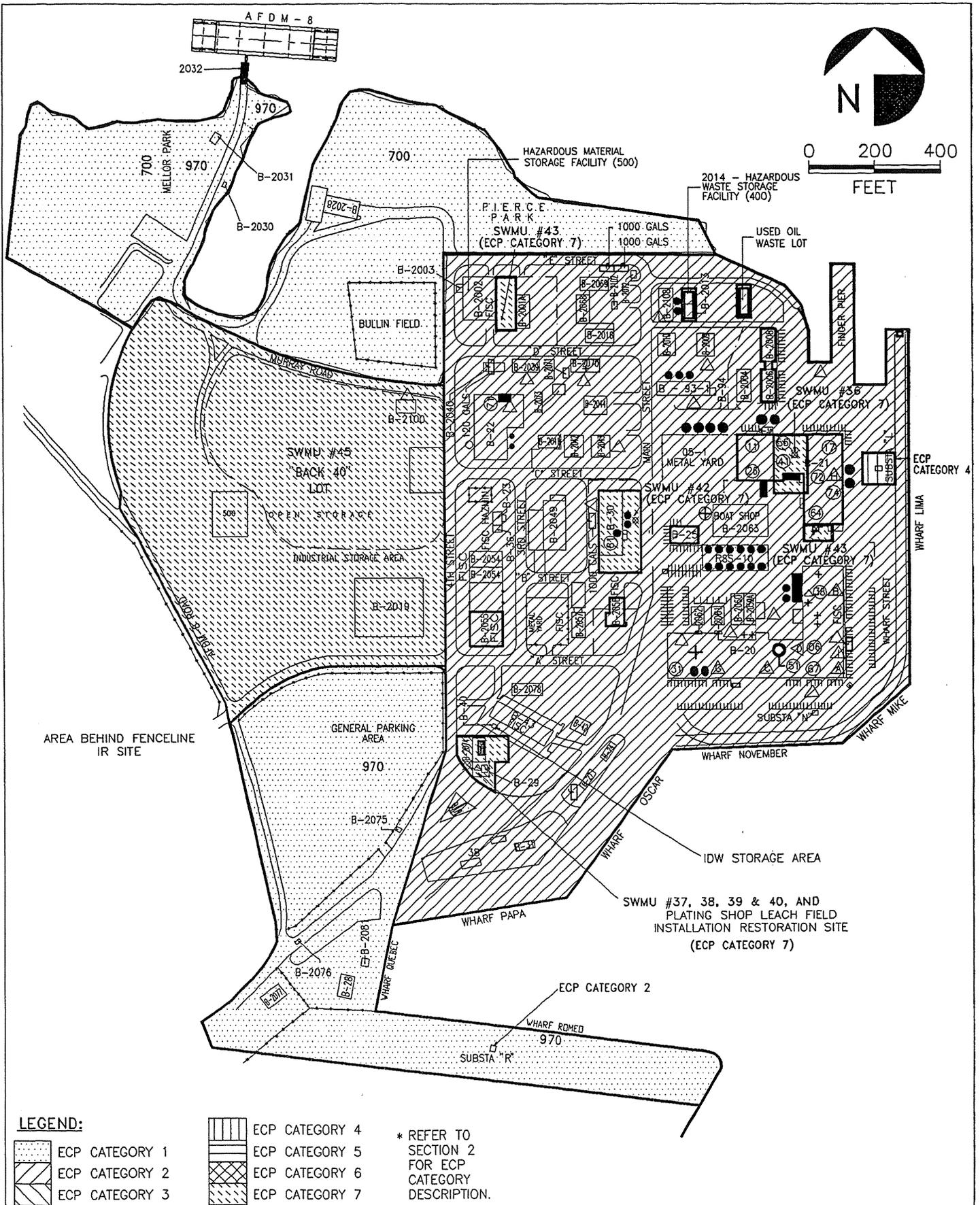
Removal actions have been proposed to remediate the sandblast grit and associated metals and the loop road disposal area (Ogden 1995e). No remediation or removal actions have occurred; therefore, this area, located in the southeast corner of the site, is considered ECP Category 6.

The remainder of the site requires additional assessment to determine the extent of contamination and identify proper remedial actions; therefore, the remainder of the site is considered ECP Category 7.

Notification is required for the storage/disposal of hazardous substances/petroleum products, and the potential presence of ordnance due to World War II battles on Guam.

**Waterfront** - The SRF Waterfront site includes two areas described as the Industrial Area and Drydock Island Area.

The SRF Waterfront Industrial area contains ECP Category 1, 2, 4, and 7 areas. The SRF Industrial area contains eight Solid Waste Management Units (SWMUs) and one IR site. While contamination may be present at selected locations within the Industrial area, the nature and extent of contamination have not been determined. Therefore, the industrial areas that are unevaluated qualify as ECP Category 7. The area surrounding substation "L", adjacent to Lima wharf, qualifies as ECP Category 4 because all necessary remedial actions were taken to clean up the non-PCB transformer oil spilled from the switchgear explosion on November 30, 1995. Other industrial areas of the site qualify for ECP Category 2 because these areas have stored, or currently store, hazardous substances or petroleum products, but there is no known release, disposal, or migration from adjacent areas. Non-industrial areas on the site qualify for ECP Category 1 because there has been no documented storage, release, or disposal (including migration from adjacent areas) of hazardous substances or petroleum products. In addition, no evidence of the storage or potential release or disposal of hazardous substances or petroleum products was noted during the site reconnaissance (Appendix A; Appendix C). Figure ES-2 illustrates the ECP categorization of the site.



Source: Naval Sea Systems Command, SRF Compound Map, Drawing No. 6115663 (1995)

EBS Findings – Industrial Area  
SRF Waterfront Site  
SRF, Guam

FIGURE  
ES-2

EBS\_30IN.DWG

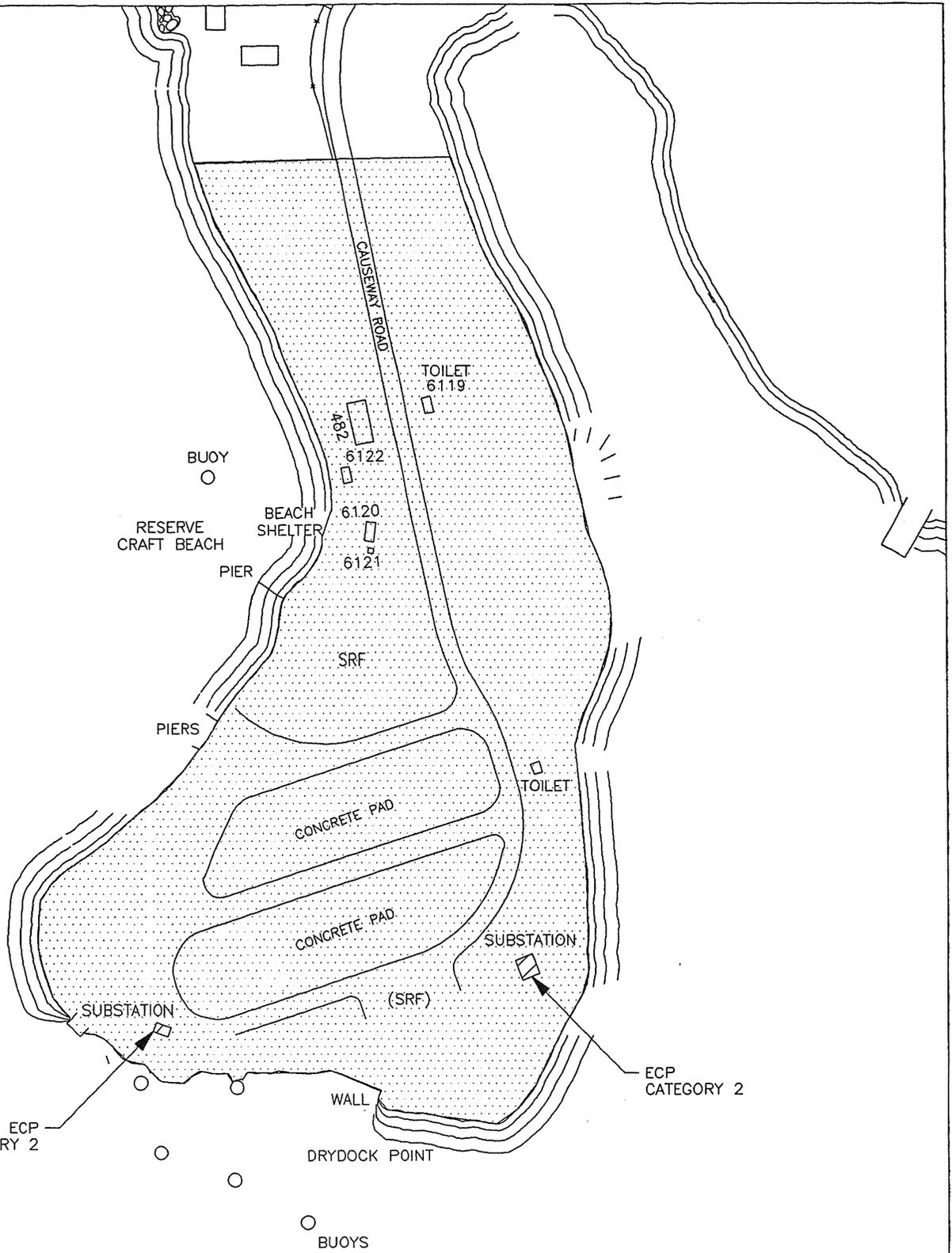
The SRF Waterfront Drydock Island area is an ECP Category 1 area because there has been no documented storage, release, or disposal (including migration from adjacent areas) of hazardous substances or petroleum products. In addition, no evidence of the storage or potential release or disposal of hazardous substances or petroleum products was noted during the site reconnaissance (Appendix A; Appendix C). Figure ES-3 illustrates the ECP categorization of the site.

The following notifications for this site are required:

- Notification of storage of hazardous substances/petroleum products;
- Notification of the presence of nonfriable asbestos;
- Notification of the potential presence of lead-based paint; and
- Notification of the potential presence of ordnance due to World War II battles on Guam.



OUTER  
APRA  
HARBOR



EBS\_30DI.DWG

**LEGEND:**

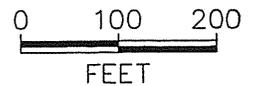


ECP CATEGORY 1  
ECP CATEGORY 2  
ECP CATEGORY 3



ECP CATEGORY 4  
ECP CATEGORY 5  
ECP CATEGORY 6  
ECP CATEGORY 7

\* REFER TO  
SECTION 2  
FOR ECP  
CATEGORY  
DESCRIPTION.



Source: PWC General Development Map (1995) Sheets 3 and 7

EBS Findings – Drydock Island Area  
SRF Waterfront Site  
SRF, Guam

FIGURE

ES-3